Exploring the link between cancer policies and cancer survival: A comparison of International Cancer Benchmarking Partnership countries

Supplement

Contents

Supplement Table S.1. Main features of health system financing and governance in seven countries

Features ¥	**Australia**	**Canada**	**Denmark**	**Ireland**	**New Zealand**	**Norway**	**United Kingdom**			
							England	**Northern Ireland**	**Scotland**	**Wales**
Demography										
Population size (2018)	25.02 m *ranging from 2.6m in Western Australia, 6.49m Victoria, 7.99m NSW* [1]	37.07 m *ranging from 0.15m in Prince Edward Island, 0.5m Newfoundland, 0.8m-1.1m New Brunswick, Saskatchewan to 4.3m Alberta, 8.4m Quebec and 14.3m Ontario)*[2]	5.78 m	4.83 m	4.86 m	5.30 m	55.98 m [3]	1.88 m [3]	5.44 m [3]	3.14 m [3]
Population density (people per sq. km of land area, 2018)[4]	3.3 *ranging from <3 in Western Australia to 10 in NSW and 28 in Victoria (2017)* [5]	4.1 *(ranging from 1.4 in Newfoundland, 1.9 in Saskatchewan, 2.3 in Manitoba, 14.8 in Ontario to 25.1 in Prince Edward Island (2016)* [6]	138.1 *(ranges not available)*	70.4 *(ranges not available)*	18.6 *(ranges not available)*	14.6 *(ranging from <10 in the north to ~ 30 in the south and >1000 in Oslo) (2018)* [7]	430 [3] (UK: 274.8)	136 [3]	40 [3]	151 [3]
Population age 65+, % (2018)	15.6	17.3	19.3	13.8	15.4	16.9	18.2			
Life expectancy at birth, years (2018)	82.6	82	81.2	82.2	81.9	82.7	81.3			
Women	*84.6*	*84*	*83.1*	*84*	*83.6*	*84.3*	*83.2* [8] *(UK: 83.0)*	*82.5* [8]	*81.0* [8]	*82.5* [8]
Men	*80.5*	*79.9*	*79.2*	*80.4*	*80.2*	*81*	*79.6* [8] *(UK: 79.3)*	*78.8* [8]	*77.1* [8]	*78.2* [8]
Health system financing §										
GDP per capita, current prices (US$ current PPP, 2018)	53,663	50,076	57,215	84,575	41,491	67,614	46,973			
Health expenditure, total (% of GDP, 2018)	9.3	10.7	10.5	7.1	9.3	10.2	9.8			
Health expenditure per capita (US$ PPP, 2018)	5005	4974	5299	4915	3923	6187	4070			
Main sources of funding for health care (% of total health expenditure)*	Tax: 68.6% VHI: 9.8% OOP: 18.3% (2016)	Tax: 68.3% VHI: 13.2% OOP: 15.1% (2018)	Tax: 84.0% VHI: 2.2% OOP: 13.7% (2017)	Tax: 72.9% VHI: 12.7% OOP: 12.3% (2017)	Tax: 69.8% CCHI: 9.5% VHI: 5.3% OOP: 12.9% (2018)	Tax: 85.5.6% OOP: 14.2% (2018)	Tax: 78.8% VHI: 3.1% OOP: 16.0% (2017)			
Principles of health system financing	Medicare, the tax-funded national health insurance system, provides free or subsidized	Principal source of health system finance is taxation by the federal, provincial/	Funding of health care is largely based on general taxation; financing and	Health system financing is predominantly through general taxation	Health system largely funded through general taxation; there is also compulsory	Health system financing is through national and municipal taxation and	Health system financing is predominantly from general national taxation, with a smaller proportion from national insurance. Around 10% of the population in the United Kingdom have supplementary VHI for more rapid and convenient access to services, in particular elective hospital treatment			

Features ¥	Australia	Canada	Denmark	Ireland	New Zealand	Norway	United Kingdom			
							England	Northern Ireland	Scotland	Wales
	health care services to the resident population About half of the population have voluntary insurance to for private treatment in hospital (VHI); uptake of VHI is promoted at federal level and subsidised by tax policy	territorial governments; medicare services entirely financed by government revenues mainly at provincial level, with federal government cash funding contributions through the Canada Health Transfer Some two-thirds of the population have VHI to cover services excluded from public funding	provision of services are integrated at the county level Some 25% of the population have supplementary voluntary insurance to gain expanded access to private providers	About 45% of the population have VHI for a wider choice of providers and faster access to the public system	social insurance for injuries and accidents (ACC) Some one-third of the population has some form of VHI to cover cost-sharing requirements or for faster access to nonurgent treatment	national insurance Just under 10% of the population have VHI for quicker access and greater choice of private providers (does not cover acute services)				
Services that are covered under the publicly financed system	Hospital care, medical services, and drugs (through the Pharmaceutical Benefits Scheme (PBS); states provide additional funding involving subsidies and incentive payments for prevention, chronic disease management and mental health care	Medically necessary physician, diagnostic, and hospital services (including inpatient prescription drugs); provincial / territorial governments' insurance plans provide varying levels of additional benefits, e.g. outpatient prescription drugs, dental care, home care, hospice care	All primary, specialist, hospital, and preventive care, as well as mental health and long-term care services; outpatient prescription drugs, adult dental care, physiotherapy, and optometry services are subsidised	All residents are entitled to receive care in public hospitals free of charge or at a reduced cost Free access to primary care under certain conditions only (see below)	Preventive care, inpatient and outpatient hospital services, primary care, inpatient and outpatient prescription drugs included in the national formulary, mental health care; dental care for schoolchildren, long-term care, home help, hospice care, disability support services	Planned and acute primary, hospital, and ambulatory care, rehabilitation, and outpatient prescription drugs on the formulary; dental care for certain population groups (e.g. children)	People who are 'ordinarily resident' are entitled to NHS care, including preventive services; inpatient and outpatient hospital care; physician services; inpatient and outpatient drugs; clinically necessary dental care; some eye care; mental health care; palliative care; some long-term care; rehabilitation; and home visits by community-based nurses Northern Ireland and Scotland health and social care are provided as integrated service; in Scotland, residents over 65 are entitled to free personal/nursing home care following assessment.			
Cost-sharing and safety net	General practitioner visits are subsidised at 100% percent of Medicare Benefits Scheme (MBS) fee, and specialist visits at 85% but GPs and specialists can choose to charge above the MBS fee Caps for pharmaceutical	No cost-sharing for publicly insured physician, diagnostic, and hospital services Prescription drugs provided in hospitals are covered publicly, coverage of outpatient prescription drugs varies by province / territory	No cost-sharing for hospital and primary care services Cost-sharing for adult dental care, outpatient prescriptions and corrective lenses Decreasing co-payment with high drug out-of-pocket spending	Cost-sharing for GP visits and prescription drugs; additional charge for inpatient care Residents with income below defined threshold/ with certain medical conditions eligible for Medical Card for free access to primary care and hospital services and drugs with reduced co-	Cost-sharing for GP services and several nursing services within GP clinics as well as outpatient prescription drugs, with exemptions for low-income and certain high-need groups, Reduced co-payments after 12 visits and no co-payments after 20 prescriptions/year	Cost-sharing for GP and specialist visits (incl. outpatient hospital care), covered prescription drugs, radiology and laboratory tests, with exemptions for certain population groups	Cost-sharing for outpatient prescription drugs; exemptions for children, people > 60, those on low income or with certain chronic conditions incl. cancer, pregnant women and new mothers Cost sharing for dental care and	All prescriptions dispensed in Northern Ireland are free of charge for everyone (drugs, wigs and surgical appliances) (since 2010) Cost sharing for dental care and optometry services with exemptions	Prescription charges abolished in 2011 Cost-sharing for dental treatment and glasses; exemptions for people <18, those on low income, pregnant women and new mothers Cost sharing for dental care and	All prescriptions dispensed in Wales are free of charge for everyone (since 2007) Cost sharing for dental care and optometry services with exemptions

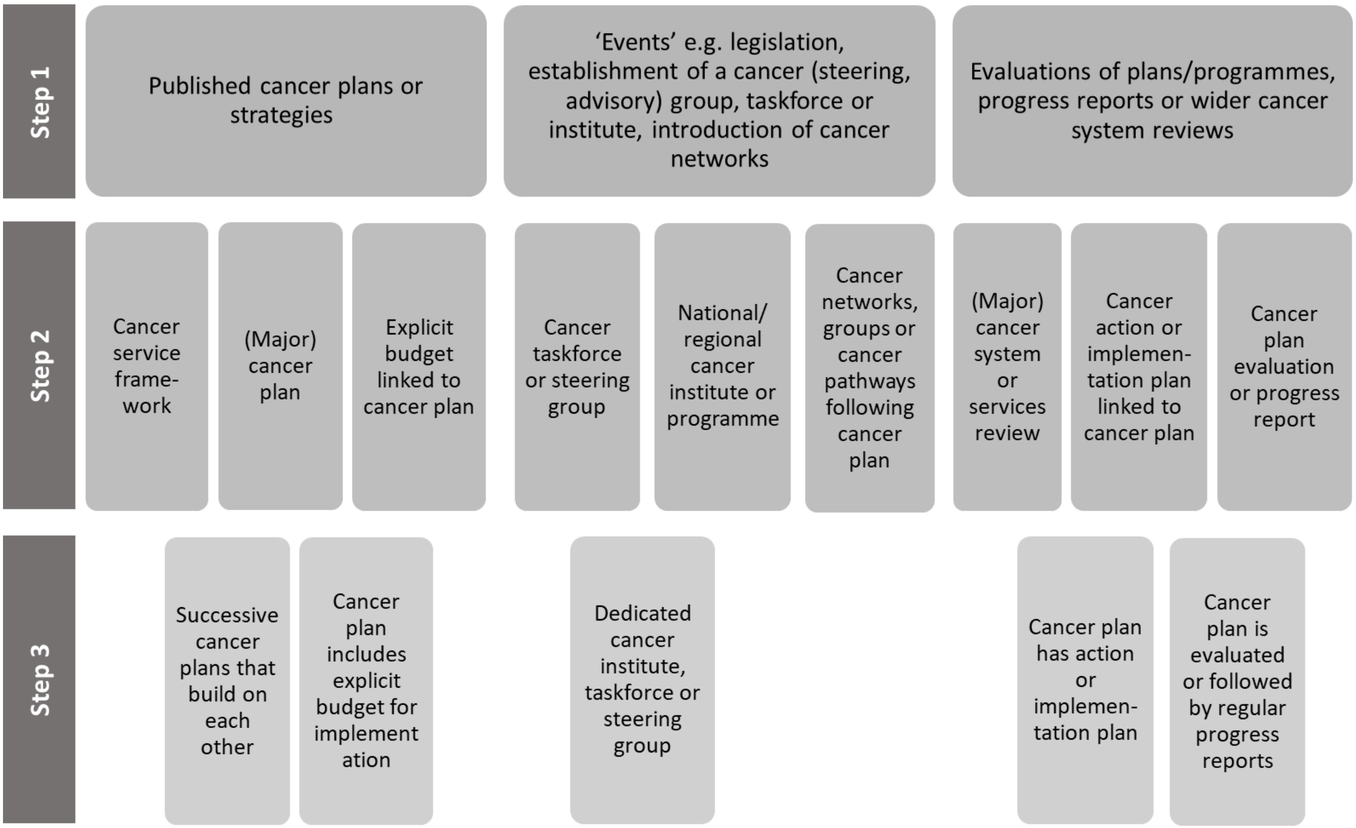
Features ¥	**Australia**	**Canada**	**Denmark**	**Ireland**	**New Zealand**	**Norway**	**United Kingdom**			
							England	**Northern Ireland**	**Scotland**	**Wales**
	out-of-pocket expenditure Medicare safety net for people who need frequent medical services			payments (one-third of the population) GP visit card (10% of the population) covers GP charges but not prescription drugs or hospital fees		Annual cost-sharing is capped	optometry services with exemptions Annual cost ceiling for people needing large number of prescription drugs		optometry services with exemptions	
Health system governance and organisation§										
Health system governance	Fiscal and functional responsibilities divided between Australian government and six states/two territories Federal government finances and administers Medicare and PBS, regulates much of the health system States administer public hospitals and regulate all hospitals and community-based health services; public hospital funding is shared between the states and federal government	Governance, organisation and delivery of health services highly decentralised with provinces and territories responsible for administering medicare and planning health services Federal government co-finances provincial/territorial programmes which must adhere to the 1985 Canada Health Act	Shared by central government, regions and municipalities Five regions governed by elected councils responsible for planning and delivery of specialised services; they own, manage and finance hospitals and finance the majority of primary care services Municipalities responsible for long-term care, disease prevention and rehabilitation; they co-finance 20% of regional services	Department of Health responsible for the governance of the health system Health Service Executive (HSE), an agency of the Department, responsible for the provision and management of health care and personal social services; HSE also responsible for the budget of the health system	Responsibility for planning, purchasing, and provision of health services delegated to 20 geographically defined district health boards (DHBs) DHBs consist of locally elected members and members appointed by the Minister of Health; DHBs own and operate public acute care and mental health hospitals; central government sets policy agenda and service requirements and plays central role in determining the publicly funded annual health budget	Many health system functions delegated to regions and municipalities Four regional health authorities (RHAs) responsible for planning, organisation and provision of specialist care; oversee investment in hospital infrastructure in consultation with Ministry of Health Municipalities responsible for organisation of primary care, public health services, and provision of emergency care	Department of Health and Care oversees the overall health system NHS England (executive public body) oversees the budget, planning and operation of the purchasing of most NHS services through 191 Clinical Commissioning Groups (4/2019) while also purchasing some specialised services directly 343 Local authorities responsible for social care	Department of Health oversees overall health and social care system Health and Social Care Board (HSCB) responsible for commissioning services Five Health and Social Care (HSC) Trusts provide integrated health and social care services to their local populations with the Northern Ireland Ambulance Service working across NI	Scottish Government Directorate for Health and Social Care responsible for health policy, administration of the NHS, social care and public health 14 regional NHS Boards responsible for planning and delivery of NHS services; eight National NHS Boards provide national services Since 2016, health boards and local authorities required to integrate certain health and social care services through 31 Integrated Joint Boards	Department of Health and Social Services responsible for health and social care Seven local health boards (LHB) and three NHS trusts responsible for planning, organising and delivering primary, community, hospital and specialist services 22 local authorities responsible for social care
Physicians per 1,000 population (head count)	3.8	2.7	4.2	3.3	3.4	4.8	2.9			
Nurses per 1,000 population (head count)	11.9	10	10.1	12.9	10.3	17.7	7.8			

Features ¥	**Australia**	**Canada**	**Denmark**	**Ireland**	**New Zealand**	**Norway**	**United Kingdom**			
							England	**Northern Ireland**	**Scotland**	**Wales**
Total hospital beds per 1,000 population (2018 or nearest year)	3.8 *(about half of hospital beds are in the private sector)*	2.6	2.4	3.0	2.6	3.5	2.5			
Principles of primary care provision	Office-based GPs, typically 4 per practice	Office-based family physicians or GPs, about 50% in group practice	Office-based GPs typically 2-4 GPs and 2-3 nurses	Office-based GPs, about 50% with 2-3 GPs support staff, working with/alongside primary care teams	GPs typically independent and self-employed, with the majority belonging to one of ~30 primary health organisations (PHOs)	Mostly self-employed GPs in practices with two to six Physicians, nurses and other staff	Mostly (60%) self-employed GPs in team-based GP practices or health centres	Self-employed GPs who increasingly provide services as part of wider teams: 17 GP Federations cover all GP practices	Self-employed GPs in team-based GP practices or health centres	Self-employed GPs in team-based GP practices or health centres
Choice of provider in primary care	Yes Registration not required	Yes Registration requirements vary by province	Yes Registration required for Group 1	Yes *(for medical card holders choice limited to participating GPs)*	Yes Registration not mandatory but GPs/PHOs must have patient list for government subsidy eligibility	Yes Registration required	Yes (if limited) Registration required	No Registration required	No Registration required	Yes (if limited) Registration required
GP gatekeeping	Yes Specialist referral needed for a patient to receive subsidy	Generally yes Non-referred consultations are paid lower fees in many provinces	Yes Specialist referral required except for certain specialists (e.g. ENT)	Yes Specialist referral required	Yes Specialist referral required	Yes Specialist referral required	Yes Specialist referral required	Yes Specialist referral required	Yes Specialist referral required	Yes Specialist referral required
Payment for primary care services	Primarily fee-for-service	Primarily fee-for-service, with increasing use of capitation in some provinces	Combination of capitation per patient (1/3) and fee-for-service (2/3)	Combination of capitation (medical card holders), fees and allowances	Combination of capitation (~50%), fees and improvement/ performance-related payments	Combination of capitation (35%, municipality), fee-for-service (35%, central government) and patient OOP (30%)	Combination of capitation (60%), fee-for-service (15%), performance-related pay (10%)	Combination of capitation, fee-for-service and performance-related pay	Combination of capitation and fees for selected services (new GP contract in place from 2018)	Combination of capitation, fee-for-service, improvement-related pay (from 2020)
Outpatient specialist care	Office-based specialists (fee-for-service) or hospital-based (salaried) specialists	Office-based specialists (fee-for-service) but majority of specialist care is hospital-based	Office-based specialists (fee-for-service) or hospital-based (salaried) specialists	Office-based specialists (fee-for-service) but majority of specialist care is hospital-based	Office-based specialists (fee-for-service) but majority of specialist care is (public) hospital-based	Office-based (lump sum, fee-for service, co-payment) and public hospital-based (salaried) specialists	Almost entirely NHS hospital-based (salaried) specialists	Almost entirely hospital-based (salaried) specialists	Mainly hospital-based (salaried) specialists	Mainly hospital-based (salaried) specialists
Hospital organisation	Local Hospital Networks (LHNs) directly manage single/small groups of public hospital services and their budgets (total of 136 LHNs across states/ territories)	Organisation varies by province; often managed by delegated health authorities or hospital boards	The regions own, manage, and finance hospitals (97% of hospitals are in public ownership)	Hospitals are organised into 7 Hospital Groups; the Group CEO of each Hospital Group reports to the National Director for Acute Services	Public hospitals are owned and financed by DHBs, in line with government goals	Most hospital care provided through 20 public hospital trusts (state-owned and governed) overseen by 4 RHAs; small non- and for-	Most hospital care is provided through ~200 NHS hospital trusts that contract with local CCGs to provide services; small non- and	Five HSC Trusts manage and administer hospitals, along with health centres, residential homes, day centres and other health and social care facilities	14 NHS Boards manage and administer hospitals, incl. acute, long-stay, mental health, psychiatric and community hospitals	Seven LHBs deliver or commission hospital-based, mental health and community services; Velindre NHS Trust provides

Features ¥	Australia	Canada	Denmark	Ireland	New Zealand	Norway	United Kingdom			
							England	Northern Ireland	Scotland	Wales
						profit private sector	for-profit private sector			specialist cancer services
Payment for hospital services	Activity-based funding using a 'national efficient price' (based on diagnosis related groups)	Annual global budgets, negotiated with the provincial ministry of health/delegated health authority	Combination of global budgets and activity-based funding (plus target levels of activity)	Activity-based funding from 2016 replaced block grants, although only covering inpatient and day cases in ~75% of acute care hospitals; ~30% of hospital budgets financed by block grants	Combination of global budget with pay-for-performance elements for elective targets	Activity-based funding using DRGs; somatic services financed at 50% from block grants	Combination of activity-based funding using DRGs (60%) and block grants for e.g. mental health, education and training	Based on contracts negotiated between the Health and Social Care Board and HSC trusts	Global budget with DRGs used for between-territory reimbursement of hospital care	Global budget via revenue allocation to LHBs
Hospital-based physicians	Salaried medical officers	Typically self-employed and paid on fee-for-services basis	Salaried and employed by regional hospitals	Salaried; 90% with 'private practice privileges' paid by fee-for-services	Salaried and employed by DHBs; specialists may operate private clinics or treat patients in private hospitals	Salaried and employed by hospital trusts	Salaried and employed by NHS trusts; specialists may provide private services (in NHS or private hospitals), estimated 50% of consultants perform private work (2009)	Salaried and employed by HSC trusts; specialists may provide private professional services	Salaried and employed by NHS Boards; specialists may provide private professional services	Salaried and employed by LHBs; specialists may provide private professional services

Note: ¥ unless indicated otherwise all sourced from OECD[9]; * CCHI: compulsory contributory health insurance; VHI = voluntary health insurance; OOP = household out-of-pocket payments; main sources of funding only so % do not add up to 100%; § sources:[10-17]

Supplement Figure S.1. Iterative steps of document analysis



Supplement Table S.2. Evolution of cancer strategies: Australia

	Commonwealth	New South Wales	Victoria	Western Australia
1995	**National Breast Cancer Centre (NBCC) established by Australian government**	**Strategic Plan for Radiotherapy Services in New South Wales 1995–2000*** Second in a series of radiotherapy strategic plans for NSW (first published in 1991)[18] Nature and content of plan unclear According to Barton and Delaney (2011)[19], NSW allocated > AUD 150m to expand radiotherapy services and increase capacity through purchase of additional linear accelerators / replacing outdated equipment [p. 433]		
1996	**Cancer control defined as one of 6 National Health Priority Areas (NHPAs)** National Health Priority Areas (NHPA) initiative is a collaborative effort between the Commonwealth and State and Territory Governments, National Health and Medical Research Council, Australian Institute of Health and Welfare, non-government organisations along with experts, clinicians and service users; "recognises that specific strategies for reducing the burden of illness should be holistic, encompassing the continuum of care from prevention, through to treatment, and management and maintenance, all underpinned by evidence based on appropriate research" [p. 1] [ref: AIHW 1997, p. 1][20]			
1997	**National Cancer Control Initiative (NCCI) established by Australian government and operated by Cancer Council Australia** NCCI was tasked to 'provide timely advice, identify appropriate initiatives' and develop recommendations to the Australian government on cancer control from prevention to palliation in Australia; described as the only "independent group dealing with all aspects of cancer nationally" [p. 183] [21] Funded by Australian government and operated by Cancer Council Australia & Cancer Council Victoria[22] Activities covered a range of areas, from guideline development, national surveys, pilot programme protocols, support for cancer registries, nationally agreed core clinical dataset for cancers, etc., including preparation of 1998 'Cancer Control towards 2002' and 2003 'Optimising cancer care in Australia' report (see below) Stopped operating in 2006 because of lack of funding; it was expected to form part of newly established Cancer Australia but this did not happen (2006)[21]			

	Commonwealth	New South Wales	Victoria	Western Australia
	National Health Priority Areas Report Cancer Control published outlined concept of using a framework to strengthen a national approach to cancer control[20]			
1998	**Cancer control towards 2002 - The first stage of a nationally coordinated plan for cancer control*** Developed by NCCI, based on NHPA priority cancer control areas and with government, NGO, service user & professional input; identifies 21 recommended actions of which 13 designated as priority actions, extending from primary prevention (tobacco, skin cancer), early detection and screening (breast, cervical, colorectal, prostate and skin cancer) to treatment (guidelines, multidisciplinary care, palliative care, psychosocial care, prostate cancer), along with general areas incl. participation of general practice in cancer control, equity, user involvement, research, hereditary cancers, data collection & clinical trials; priority actions formed basis of NCCI work plan for subsequent 5 years[22]		**Review of Radiotherapy Services Victoria** Commissioned by the Department of Human Services, Victoria, to "provide the Government with an analysis of options for future development of radiotherapy services"; outlines 'options for the development of radiotherapy services' in Victoria[23]	
	National Cancer Strategies Group (CSG) established as sub-committee of the NHPA Council Committee of the Australian government Department of Health with non-government chair and representatives of service users, professionals and NGOs, along with NCCI, NBCC and states/territories; tasked with developing a National Cancer Control Plan based on NCCI's priority setting process outlined in 'Cancer Control towards 2002' with consideration of cost-benefits, equity and acceptability, leading to the 2001 PAAC (below) [22]			
2001	**Priorities for Action in Cancer Control: 2001-2003 (PACC)*** Developed by CSG; created as part of the first National Action Plan for cancer; identified 13 priority actions for implementation in prevention, screening & early detection, treatment, and supportive & palliative care and addressing 7 of the 8 NHPA priority cancers [22] Did not include an implementation plan but recommended that such plan should be developed **Tripartite National Strategic Plan for Radiation Oncology*** Developed by the Faculty of Radiation Oncology of the Royal Australian and New Zealand College of Radiologists (RANZCR), the Australian Institute of Radiography (AIR); and the Australasian College of Physical Scientists & Engineers in Medicine (ACPSEM) [24]			

	Commonwealth	New South Wales	Victoria	Western Australia
2002	**Radiation Oncology Inquiry: A vision for radiotherapy ('Baume report')*** Inquiry set up, in part, in response the 2001 Tripartite National Strategic Plan for Radiation Oncology and wider concerns about radiotherapy services at that time which had become a political priority [25] Inquiry aimed "to examine and provide recommendations on Australia's usage of radiation therapy as a cancer treatment modality with reference to current capacity, international best practice, clinical efficacy, as well as other cancer treatment modalities" [26] Key recommendations of the Inquiry: (i) to establish independent national body to oversee radiotherapy and address fragmentation of health care delivery; (ii) to improve the availability of radiotherapy in rural and regional Australia; (iii) to ensure adequate workforce, in particular radiation therapy and medical physics; (iv) to ensure appropriate quality of services through accreditation; (v) to align payment for radiotherapy between public and private sector by pooling state, territory and federal funding [p. 56][25]			
2003	**Optimising Cancer Care in Australia (OCCA)** Jointly developed by the Cancer Council Australia, Clinical Oncological Society of Australia (COSA) and NCCI; based on consultations with key stakeholders; aims to provide the government/s with "the outline of an agenda and a process for reform of cancer care" [p. x][27] Makes 12 recommendations around the themes of quality, access and resourcing: (i) integrated multidisciplinary care; (ii) quality-driven organisational reform for supportive care; (iii) voluntary accreditation for cancer care services; (iv) access to clinical trials; (v) implementation of radiation/medical oncology workforce recommendations; (vi) consideration on non-medical cancer workforce; (vii) psycho-oncology; (viii) implementation of radiation oncology recommendations; (ix) access to cancer drugs; (x) travel support to improve access to care; (xi) consideration of needs of special population, especially Aboriginal peoples; (xii) to establish national Task Force on Cancer to 'oversee and drive reform process' [p. xviii][27]; formulates additional 19 'action items' that are 'less urgent' but need to be addressed does not provide details on financing of plan	**A clinical service framework for optimising cancer care in NSW*** Developed by the NSW Health Clinical Expert Reference Group (CERG) for Cancer and published by NSW Department of Health; aims to optimise cancer care by (i) setting organisational and clinical standards of care; (ii) describing the optimal structure of a cancer service; (iii) identifying 'practical goals to support implementation and monitor progress' [p. 27][28] Set out 7 standards to form 'core of any patient-centred, best practice cancer service' p. 28]: 1. Implementation, monitoring and review of standards for cancer care; 2. Area-wide approach to optimising cancer care; 3. Patient-centred care; 4. Access to appropriate clinical services; 5. Multidisciplinary care; 6. Communication between primary, secondary and tertiary services; 7. Education, training and continuing professional development [p. 28][28] 2004-06 Cancer Plan[28] notes that implementation of the framework began in 2003, with progress on achievement of standards monitored by the NSW Department of Health on a six-monthly basis; overall compliance due by mid-2005 [p. 27][28]	**A Cancer Services Framework for Victoria*** Published by 'The Collaboration for Cancer Outcomes and Evaluation; while not a formal government report, it is credited by the Victoria government as having formed the beginning of 'Victoria's cancer reform agenda'; sets out 3 principles: (i) multidisciplinary cancer care to ensure effective and efficient patient management; (ii) maximum geographic access for patients and their carers and families; (iii) high-quality and safe cancer services[29]	**Review of Cancer Services for the Health Reform Committee of Western Australia*** Review led by James Bishop ('Bishop report) to inform the 2004 “A Healthy Future for Western Australians: Report of the Health Reform Committee” [30] Nature and scope of the report unclear

	Commonwealth	New South Wales	Victoria	Western Australia
2004	Radiation Oncology Reform Implementation Committee (RORIC) established by Australian Health Ministers' Conference RORIC (Initially: Radiation Oncology Jurisdictional Implementation Group; ROJIG), was an inter-jurisdictional committee chaired by the Commonwealth Department of Health and established "to progress national radiation oncology reforms" in response to the 2002 Baume report; main aim was to "facilitate the planning and implementation of strategies to ensure improved radiation therapy service outcomes for patients"[31] Achievements include the publication of the Radiation Oncology Practice Standards and accompanying supplementary guide; radiotherapy plans developed for 4 (out of 5) states and ACT; RORIC Workforce Reform Framework (see below); range of education/training programmes for medical physicists, radiation therapy and oncology RORIC was discontinued in 2013[31]	**Planning for Radiotherapy Services in NSW to 2006*** Third in a series of radiotherapy strategic plans for NSW; adopted 50% target for radiotherapy treatment, proposed an expansion of up to seven additional linear accelerators for NSW [ref: 2009 Cancer Council radiotherapy [p. 9][32] According to Barton and Delaney (2011)[19], NSW allocated another AUD 13m for operating expenses on new linear accelerators [p. 433]	**Ministerial Taskforce for Cancer established by Victoria government** Taskforce charged with[33]: - advising on patient care, including cancer service integration, quality and accessibility of services - 'forging better links between government, national cancer bodies, and cancer initiatives in other states' - advising on processes to coordinate cancer research and translate its results into better treatment - strengthening collection of data on cancer and results of cancer treatment to inform treatment and research. provides a forum for collaboration for key stakeholders 'to plan and implement effective, workable reforms to the cancer system'	**Sir Charles Gairdner Hospital proposed as place for State Centre for Cancer Care** 2004 Health Reform Committee report 'fully endorses' to establish a State Centre for Cancer Care "to integrate and coordinate delivery of cancer care across the State" [p. 65] with Sir Charles Gairdner Hospital to be designated for this purpose[30]
		Cancer Institute (NSW) Act 2003 establishes the Cancer Institute NSW Act defines objectives of Cancer Institute (NSW)[34]: 1. to increase the survival rate for cancer patients, 2. to reduce the incidence of cancer in the community, 3. to improve the quality of life of cancer patients and their carers, 4. to operate as a source of expertise on cancer control for the government, health service providers, medical researchers and the general community The Act further specifies a series of general functions of the Cancer Institute, including the development, “in conjunction with the Ministry of Health and public health organisations” of a “State Cancer Plan by 30 June 2004”, including the regular (every 2 years or period stipulated by the Minister for Health) review of and recommendation of changes to the Plan to be considered by the Minister for Health.		
		NSW Cancer Plan 2004-2006 Described as "Australia’s first comprehensive State cancer plan designed for immediate implementation" [p. 4][35]; builds on the 2003 Clinical Service Framework for Optimising Cancer Care and 2003 OCCA recommendations Aims to: (i) define the strategic principles for the future development and acceleration of effective cancer control in NSW; (ii) develop goals for cancer control that will substantially improve		

	Commonwealth	New South Wales	Victoria	Western Australia
		outcomes, and (iii) develop high-priority programmes to achieve the goals Outlines 33 specific goals in 10 strategic areas, each with a defined 'key result' and a set of outcomes (total of 79): (i) coordination of cancer control (1 goal); (ii) prevention and early detection (6 goals); (iii) service provision (7 goals); (iv) special issues in cancer care (6 goals); (v) information (2 goals); (vi) education (1 goal); (vii) workforce (1 goal); (viii) research (7 goals); (ix) fundraising (1 goal); (x) quality, evaluation and accreditation (1 goal)[28] Does not provide details on financing of the plan		
2005	**National Service Improvement Framework for Cancer** Developed by the National Service Improvement Framework Expert Panel under the auspices of the National Health Priority Action Council following agreement, in 2002, by the Australian Health Ministers' Advisory Council to develop service improvement frameworks for NHPA priorities Described as 'high level guides for health services' with the aim to 'support and complement' clinical frameworks and local plans. Cancer framework was the first to be developed, setting out what people 'with, or at risk of, cancer should expect to be provided' with by the Australian health care system [p. 5][36] Identifies 'critical intervention points' along the cancer journey, from reducing risk through primary prevention policies; early detection (screening, referral pathways); active treatment (access, coordination, multidisciplinary care, guidelines, clinical trial participation); survivorship support; palliative/end-of-life care [p. 10][36] describes 8 national priority actions to 'underpin critical intervention points', including integrated/networked cancer services, service accreditation, funding for multidisciplinary care, monitoring, service user information, support for primary care providers, needs of disadvantaged groups, up-to-date evidence. Does not include an implementation plan (to be developed)[36]	**NSW Oncology Group (NSWOG) Program formed** NSWOG formed following 2004-2006 Cancer Plan under Goal 1 (Promote coordination of cancer control activities'); set up to ensure that clinical cancer control programmes in NSW are 'coordinated and optimal'; tasked with reviewing and adopting "best practice guidelines, encourage sub-specialty training, implement clinical trials and review State-wide, national and international research" [p. 37][28] Programme comprised 20 groups (cancer type or clinical grouping), bringing together clinicians, researchers, services users and planners; operated from 2005 to 2009, with an evaluation reporting e.g. that 9 groups had adopted the Victorian Patient Management Frameworks (later to become OCPs) to NSW setting, or the development of cancer minimum dataset extensions and clinical indicator suits[37] Unclear whether NSWOG is still in place following the 2009 evaluation of the programme	**Towards better care for all cancer patients in Victoria** Action plan 2005-06 of the Victoria Ministerial Taskforce for Cancer; identifies three priority areas and set of focus areas and key deliverables for the period 2005-06 within each: (i) clinical services (integrated approach to cancer; care development through 10 tumour streams; statewide approaches to service improvement); (ii) research (strategic approach to cancer research; knowledge translating into care and services); (iii) data/information (data collection/ information management; improved reporting structures; benchmarks for best practice); working group tasked with "providing and achieving set goals" in priority areas[33]	**Western Australia Cancer Services Taskforce (WACST) convened by Health WA** Taskforce convened by the Acting Director General of Health WA; established "to make recommendations to the Cancer Service in WA", to review the provision of cancer services in WA and "develop a framework for improvement of services over the next five years" [p. v][38]
			Integrated Cancer Services (ICS) established ICS (3 metropolitan; 5 regional ICS) comprise "clusters of hospitals and associated health services that deliver services for people with all types of cancers within a geographic area" (incl. public hospitals, community-based services, GPs and other primary health organisations, private hospitals and supportive care services); established on recommendation of 'A cancer services framework for Victoria' (2003) (statewide paediatric ICS	**WA Health Cancer Services Framework** Developed by the WA Health Cancer Services Taskforce; aims to guide the establishment of a State Cancer Network (the first 'official clinical network' in WA) whose director is expected to lead on implementing identified framework initiatives; network to establish Tumour Collaboratives to "define standards and ensure effective coordination and delivery of all aspects of care - from diagnosis through referral, to treatment and follow-up" [p. i][38]

	Commonwealth	New South Wales	Victoria	Western Australia
			established as part of the Caring for children package in 2004)[29]	Identifies 9 strategic areas with 45 specified initiatives and outcomes to be achieved over the period 2005-2010: (i) Director of the Cancer Network; (ii) Structure of the Cancer Network; (iii) Cancer Centres; (iv) Models of Care: Tumour Collaboratives; (v) Patient Support and Cancer Nurse Coordination; (vi) Clinical trials and cancer data collection; (vii) Rural cancer services; (viii) Prevention and screening; (ix) Workforce planning **WA Cancer and Palliative Care Network (WACPCN) established** WACPCN tasked with the implementation of the WA Health Cancer Services Framework; formation of the WACPCN has resulted in the "appointment of cancer care coordinators and psycho-oncologists, the establishment of tumour site collaboratives, expansion of multidisciplinary clinics, and a rural education program" [p. 15][39]
2006	**Cancer Australia Bill establishes Cancer Australia** Bill tasks Cancer Australia with[40]: - providing national leadership in cancer control - guiding scientific improvements to cancer prevention, treatment and care - coordinating and liaising between key stakeholder with an interest in cancer - making recommendations to the government about cancer policy and priorities - overseeing a dedicated budget for research into cancer - assisting with the implementation of government cancer control policies and programmes - financial support [allocated by parliament] for research and implementation of government policies and programmes in cancer control	**NSW Cancer Plan 2004-2006. Lessening the impact of cancer. A Two Year Progress Report** (g) Published by the Cancer Institute NSW; documents achievements of 2004-2006 Cancer Plan by 2006[35]	**Victorian Cancer Agency (VCA) established** Set up to "to enable cancer research across Victoria"; through the VCA, the Victorian government "has invested more than $225 million to support translational research infrastructure, workforce initiatives and collaborative projects"[41]	
		NSW Cancer Plan 2007-2010: Accelerating the Control of Cancer Published by the Cancer Institute NSW; described as "a clear commitment by the NSW Government to further reduce the devastating effects of cancer in our community" [p. 3][42]; builds on 2004-2006 Cancer Plan ('first cancer plan') and developed in the context of wider NSW health policy; seeks to continue and further expand programmes Focuses on 5 'high priorities': (i) preventing cancer; (ii) detecting cancer early; (iii) improving cancer services and professional education; (iv) accelerating improvement through research; (v) relevant data and information Defines, for each priority, an overarching goal (e.g. 'decrease cancer incidence for priority 1); a set of programmes, each with a stated aim; initiatives to achieve the aim; and measures of progress		

	Commonwealth	New South Wales	Victoria	Western Australia
		('evaluation framework') although only a few aims are quantified (e.g. decrease smoking prevalence by 1% p.a.') or have explicit milestones All programmes of the plan are to be evaluated, with evaluation at level of NSW Cancer Plan objectives, planned results and individual programmes; evaluation to be led by Cancer Institute NSW in partnership with other key stakeholders[42] Does not provide details on financing of the plan		
2007			**Victorian Radiotherapy Service Plan*** Developed in 2006-07 by the Victorian Department of Health as part of the coordination efforts of the national Radiation Oncology Reform Implementation Committee (RORIC) to facilitate planning and implementation of radiotherapy services by jurisdictions across Australia Focused on Integrated Cancer Services established in 2005, modelling demand for radiotherapy across ICS to 2011; projected need for 44 linear accelerators by 2011 (existing LAs by end of 2008: 36); Radiotherapy Minimum Dataset to be expanded to include all radiotherapy services in Victoria[43]	
2008			**Victoria's Cancer Action Plan 2008-2011** Published by the Victorian Government Department of Human Services; outlines 4 action areas, each with 3 priorities that are further specified by a defined set of actions, (numeric) targets and timed milestones: (i) prevention and screening; (ii) cancer research and translation; (iii) innovation in treatment & sustainable ICS; (iv) supporting patients & carers; each action areas has 3 priorities [44]	**Model of Care for Cancer*** Published by the Department of Health Western Australia/WACPCN; 'Model of Care' refers to Tumour Collaboratives as set out in the 2005 Cancer Services Framework; describe as "strategic statewide linking of all public cancer services" to improve the cancer care in WA; elements include: clear referral pathways; evidence-based treatment guidelines; multidisciplinary teams; "Tumour collaboratives discuss priorities in services and develop standards of care and treatment guidelines" [p. 18][39]
2010	**Delivering Better Cancer Care** published by Australian Government but nature of document unclear; sets out national (financial) commitments to cancer care to improve cancer care in 4 areas: investment in infrastructure, national standards ('nationally agreed and consistent best practice cancer protocols and pathways' [p. 7]), primary prevention and other cancer-related efforts[45]	**NSW Cancer Plan 2011-2015: Lessening the impact of cancer in NSW** Prepared by Cancer Institute NSW and published by the NSW Government; third plan described as "a clear commitment by the NSW Government to lessen the impact of cancer in our community" [p. 2][46] Organised around 3 overarching goals and 7 'cross-cutting issues, each with a set of objectives; strategies for each objective; defined activities for each strategy; measures for activities and identified lead and collaborators; goals: (1) reduce incidence of cancer (modifiable risk factors: 6 objectives; screening/awareness: 2 objectives); (2) improving survival of people with cancer (4 objectives); (3) Improving quality of life (1 objective); cross-cutting issues: (i) monitoring and evaluation (1 objective);	**Regional Cancer Centre infrastructure funded** mentioned in Victorian cancer plan 2016-2020 but not explained further[47]	

	Commonwealth	New South Wales	Victoria	Western Australia
		(ii) strategic research investment (1 objective); (iii) Aboriginal people (1 objective); (iv) rural populations (1 objective); (v) culturally and linguistically diverse communities (1 objective); (vi) people who are socioeconomically disadvantaged (1 objectives); (vii) role of primary and community care (1 objective)[46]] Does not provide details on financing of the plan		
		Radiotherapy Services in NSW Strategic Plan to 2016 Published by NSW Department of Health with the aim to provide "direction for the continued, improved access to radiotherapy services in NSW" and identify the geographic areas for new and expanded radiotherapy services in NSW, as resources become available" [p. 4][48]; describes areas where radiotherapy expansion is underway and identifies "geographic areas of need for future new services and expansion of existing services" [p. 5][48] Notes that between 1995 and 2010, 24 linear accelerators had been replaced in the public sector; estimates that 17 existing linear accelerators would need to be replaced by 2016 by Area Health Services [p. 44/45]		
2011	**National Cancer Expert Reference Group (NCERG) established by COAG** NCERG is jointly chaired by the Commonwealth Government and Victoria with representation from all jurisdictions, Cancer Australia, Cancer Council Australia, COSA and consumer input; described as "Australia's only government endorsed, high-level, expert national cancer forum"; tasked to develop a National Cancer Work Plan[49]			**Western Australia Cancer Plan 2012-2017** Published by Department of Health WA/WACPCN; described as "WA Health's new framework for a cohesive and coordinated approach to cancer control for the state" and 'a first for Western Australia', building on progress made since the publication of the 2005 Cancer Services Framework [p. 5][39] Identifies five priority areas, each with a set of specific objectives and key activities for the period 2012-17: (i) prevention (3 objectives); (ii) screening and early detection (3 objectives); (iii) equitable access to best practice and care through the cancer journey (5 objectives); (iv) research and evaluation (2 objectives); (v) planning and use of resources (5 objectives) Notes that a framework for delivery of cancer priorities was developed to support implementation of the plan and 'steer the cancer plan' over the period 2012-2017 [p. 10][39] Does not provide details on financing of the plan
	RORIC Workforce Reform Framework Framework was developed to "guide and inform .. ongoing collaborative efforts" to build radiation oncology capacity across Australia; focus is on 3 groups: radiation oncologists, radiation therapists and radiation oncology medical physicists; outlines 4 key areas of workforce reform activity: (i)			

	Commonwealth	New South Wales	Victoria	Western Australia
	workforce planning; (ii) capacity building and skills development; (iii) policy, funding and regulation; (iv) reform for more effective, efficient and accessible service delivery RORIC to support framework implementation by means of providing a forum for collaboration across jurisdictions and stakeholders across Australia [50]			
2012	**COAG Improving Cancer Care Initiative: National Cancer Work Plan** (p) Developed by NCERG and endorsed by COAG; formulates "suite of initiatives, focused on providing appropriate, efficient and well coordinated care for people affected by cancer and their families, from diagnosis through treatment and support to the management of follow-up care and survivorship" [p. 1][51] Based on 3 principles: (i) focus on actions that require national coordination; build on existing cancer plans of jurisdictions and 'enhance current investments' that federal/state government/s have made; (ii) informed by 'best-practice cancer research' and evidence on treatment and supportive care; (iii) focus on 'high-impact and achievable actions' in context of fiscal environment Identifies 3 priority action areas ('initiatives'): 1. Pathways of cancer care; 2. Efficient and effective cancer services; 3. Evidence-based cancer treatment[51] Implementation of the Plan is overseen by NCERG "with funding for projects from the Australian Health Ministers' Advisory Council (AHMAC) cost-shared budget, the Commonwealth and jurisdictions" [p. 1][52] **Tripartite National Strategic Plan for Radiation Oncology 2012-2022** Developed by RANZCR, AIR and ACPSEM, with funding from the Australian Government Department of Health and Ageing; identifies a set of issues that impact on radiation oncology nationally and 5 strategic directions and associated objectives for radiation oncology for 2012-2022, each with a set of measures defining 'success' and policy recommendations: (i) providing quality radiation oncology service (25 recommendations); (ii) resourcing the radiation oncology sector (26); (iii) supporting rural and regional access to radiation oncology (15); (iv) supporting aboriginal and Torres Strait Islander access to radiation oncology (10); (v) research as foundation for future practice (21) (total of 93 recommendations)[24]	**Aboriginal Cancer Partnership Project implemented** Funded by NSW Department of Health (2012-2014) and implemented by the Cancer Institute NSW, Aboriginal Health and Medical Research Council (AH&MRC) and Cancer Council NSW[53] Aimed to: (i) improve cancer health outcomes of Aboriginal peoples in NSW through awareness raising and increasing the capacity of Aboriginal communities to respond to cancer; (ii) build the skills, knowledge and capacity of the Aboriginal health workforce in cancer care and so improve care of Aboriginal peoples with cancer; (iii) build partnerships between mainstream services and Aboriginal Community Controlled Health Services to enhance the cultural capability of health professionals working in cancer care, improve service accessibility and partnerships; (iv) reduce barriers experienced by Aboriginal peoples who need to access cancer care services.		

	Commonwealth	New South Wales	Victoria	Western Australia
2013	**National cancer workforce strategic framework** Developed by Health Workforce Australia (HWA) and in consultation with NCERG; one of the suite of initiatives launched as part of the 2012 National Cancer Work Plan; seeks "to provide a set of strategic options for adoption at national, jurisdictional and cancer organisation level" [p. 4]; sets out a vision for a 'right-skilled cancer workforce' which delivers 'safe, effective, consumer-centred care in the most appropriate setting' [p. 4][54] Sets out 5 priority recommendations ('domains'), each with a set of 5 strategic actions: (i) develop cancer workforce in alignment with agreed national best practice pathways and ongoing health reform initiatives; (ii) build workforce capacity to respond and adapt to the rapid rate of change in cancer care; (iii) support leadership at all organisational levels to ensure health system sustainability and responsiveness; (iv) plan for optimal use of skills and workforce innovation and reform through development and use of data and information; (v) support work by governments, regulatory, funding and policy bodies to deliver cancer workforce reform Does not provide implementation plan but notes that HWA will 'work with key stakeholders to drive adoption and implementation' of the plan [p. 5][54]	**Cancer Institute NSW becomes a formal pillar of NSW Health** 2011 NSW health reform established the NSW Department of Health as the Ministry of Health and introduced changes aiming to strengthen governance arrangements across the public health system in NSW, including establishing the Cancer Institute NSW as an official pillar of NSW Health[55]		
2014			**Improving Cancer Outcomes Act 2014** Described as supporting the Victoria government's 'overall strategy for cancer control' and as 'establishing a modern, flexible and principles-based legislative framework' to strengthen ability to respond to the various developments in cancer (scientific, technology, policy)[56] Purpose: (i) articulates the role and functions of the Secretary (of DH) with respect to cancer; (ii) authorises the collection of information relating to cancer; (iii) establishes a framework for the appropriate management use and disclosure of the information; (iv) requires the preparation of a Cancer Plan every four years; (v) provides for the registration of Cancer Council Victoria as a company; (vi) repeals the Cancer Act 1958[57]	
2015	**Jurisdiction implementation of Optimal Cancer Care Pathways (OCPs) endorsed by Australian Health Ministers Advisory Council** OCPs originate from work in Victoria during 2006-09 on tumour specific Patient Management Frameworks (PMFs), aimed at 'facilitating consistent care and appropriate referral pathways based on evidence and best practice' [ref: 2012/13 COAG progress p. 39]; renewed within National			**WA Cancer Taskforce established by acting director general of Health** Taskforce was established in April 2015 to "seek clinician advice on the current issues facing the provision of adult cancer services across public hospital sites"[59] No further detail available but likely that the Taskforce was established in response to significant

	Commonwealth	New South Wales	Victoria	Western Australia
	Cancer Work Plan initiative on Referral Protocols and developed into OCP through consultation with a wide range of stakeholders OCPs map the key steps from prevention to survivorship or end-of-life care and describe the principles and expected standards of care at each stage [p. 3][58] 2015 national endorsement was for 15 OCPs for initial implementation in 2016/17, supported by an allocation of AUD 198,150 from the cost shared budget [p. 4][58]			challenges re: wait times for diagnostic investigations, surgery and treatment of some cancers and in some parts of the system[60]
				WA Adult Cancer Care Taskforce Report* Prepared by the Cancer Taskforce established in 2015; actual report not available (implementation plan only); described as having outlined 14 priority actions "to help strengthen and streamline cancer services" across WA[59]; immediate actions include 're-introduction of clinical nurse specialist roles and audit of wait times; Department of Health tasked by the health minister to implement the priority actions, with an expert advisory group established to oversee implementation **WA Cancer Care Taskforce Recommendations and Implementation Plan** Published by WA Department of Health; aim is "to plan and deliver the WA Cancer Care Taskforce recommendations", specifically to "optimise the management of cancer services ... to minimise waiting times and maximise an efficient and safe patient pathway" [p. 1][61] with expected outcomes including: improved access to cancer services; improved timeliness of care; improved safety and quality outcomes for patients; improved patient experiences: defines, for each of the 14 Taskforce recommendations a key deliverable and the timeframe for delivery; foresees overall period of 2 years for implementation for longer term projects [61]
2016		**NSW Cancer Plan. A statewide plan for lessening the impact of cancers in NSW** Prepared by the Cancer Institute NSW; described as a "comprehensive and inclusive roadmap" [p. 3[62]] for coordinated, collaborative approach to cancer control along the entire continuum and with a particular focus on Aboriginal communities and culturally and linguistically diverse communities Similar to 2011-15 plan reflects 3 goals set out in the 2003 Cancer Institute Act: (i) reduce the incidence of cancer; (ii) increase the survival of people with cancer; (iii) improve the quality of life of people with cancer, each with defined objectives (total of 8), and strategies, prioritised actions and responsible leads for each objective	**Victorian cancer plan 2016–2020. Improving cancer outcomes for all Victorians** Published by Victoria government, Department of Health and Human Services; First cancer plan developed under the 2014 Act Establishes long-term goals "that focus our actions and guide the development of future plans" [p. 4][47], sets goals to 2040 to (i) halve the proportion of Victorians diagnosed with preventable cancers; (ii) double the improvement in 1 and 5 year survival of Victorians with cancer; (iii) ensure Victorians have the best possible experience of the cancer treatment and care system; (iv) achieve equitable outcomes for all Victorians Defines 5 action areas with focused areas for action for the period 2016-2020 within each: (i) primary	

	Commonwealth	New South Wales	Victoria	Western Australia
		Cancer Institute NSW tasked with overseeing progress of plan, with NSW Cancer Plan Performance Index report progress against the objectives of the plan; with a review of plan achievements foreseen for 2018 Does not provide details on financing of the plan	prevention; (ii) screening and early detection; (iii) treatment; (iv) wellbeing and support; (v) research Implementation of plan actions to be supported by a Victorian statewide cancer forum "held every two years to continually inform objectives and policy priorities for cancer control" [p. 65][47]; process to include development of implementation priorities outlining main initiatives 'that require collective efforts' and and a list of 25 potential indicators across the 5 action areas to monitor progress, complemented by a "population-level health and wellbeing outcomes framework" [p. 65][47] Does not provide details on financing of plan	
			Victorian Comprehensive Cancer Centre opens Described as Australia's "first facility conceived and designed to save lives by connecting the world's best in cancer research, education, treatment and care" Brings together 10 "world-leading Victorian-based cancer organisations to share knowledge and resources to drive the next generation of cancer research, education, treatment and care" [63] Funding first announced in 2009; delivered under a public-private partnership at total estimated cost of > AUD 1bn	
2017	**Cancer Australia launches National Cancer Control Indicators (NCCI) website** Comprises a set of indicators across the cancer care control continuum to inform policymakers, practitioners and the wider public about progress in cancer control across Australia, to monitor national trends and benchmark internationally.[64]	**NSW Cancer Plan 2011-2015. Evaluation synopsis** Published by Cancer Institute NSW and NSW Government; reports on progress towards achieving the 2011-15 Cancer Plan's goals and targeted activities with a focus on: (i) awareness of cancer risk factors and behaviour change; (ii) cancer awareness and access for priority populations; (iii) statewide approach to cancer control; (iv) early detection; (v) cancer services; (vi) uptake of evidence; (vii) user experience; (viii) knowledge generation and research capacity[65]		
2018 and after			**Victorian Cancer Plan 2020-2024 in preparation**	**WA Cancer Plan 2020–2025**

Note. Green colour – 'event'; orange colour – published cancer plan or strategy; blue colour – evaluation, progress report or cancer system review

Supplement Table S.3. Evolution of cancer strategies: Canada

	Federal level (a)	Alberta	Manitoba (b)	New Brunswick (c)	Newfoundland (d)
1996				**Cancer Services Advisory Committee (CSAC) formed** cited in the 2003 Cancer Control Accountability Framework report[66], no further information available	
1997			**CancerCare Manitoba Foundation (CCMF) founded as charitable organisation** CCMF raises funds solely for CancerCare Manitoba to cover programmes that are not covered by the government[67] Since 2000, CCMF has "been able to grant more than $125 million"[68]		
1998				**Cancer Services Action Plan for New Brunswickers*** Developed by CSAC, identified 5 priorities/strategic directions and led to the establishment of Cancer Care Steering Committee to provide advice to the Department of Health and Wellness on the implementation of the Cancer Services Action Plan According to the 2003 Cancer control accountability framework report, the five priorities were not acted upon and "there is no vehicle through which the priorities can be effectively pursued" [p. 31][66]	
1999	**Multi-stakeholder group led by Canadian Cancer Society to develop pan-Canadian approach to cancer control** Group comprising Canadian Cancer Society, National Cancer Institute of Canada, Canadian Association of Provincial Cancer Agencies and Health Canada[69] Unclear whether this group is similar to the 'Canadian Strategy for Cancer Control steering committee' which proposed, in 2001, to establish a 'national council' for the CSCC[70]	**Alberta Coordinating Council for Cancer Control (ACCCC) established by Alberta Cancer Board** Alberta Cancer Board (ACB), established in 1967 as 'Provincial Cancer Hospitals Board' and renamed ACB by 1982 Cancer Programs Act ; mandated to "establish and operate provincial cancer hospitals and out-patient facilities for the diagnosis of cancer, the treatment and care of cancer patients and cancer research, and extends to diseases that are non-cancerous but are capable of being diagnosed or treated by similar methods as those used for the diagnosis or treatment of cancer"[71] [remit slightly expanded following 2000 Cancer Programs Act] ACCCC established to foster collaboration among ACB, the health authorities, the Canadian Cancer Society (CCS) and the Ministry of Health in planning cancer control activities			
	Canadian Association of Provincial Cancer Agencies (CAPCA) officially incorporated CAPCA is an inter-provincial association of provincial/territorial cancer agencies; seeks to support and "facilitate effective leadership, collaboration, communication and advocacy for cancer care and control"; vision to "address common challenges and opportunities to enhance and strengthen" cancer care delivery across Canada through collaboration with national and provincial partners[72]				

	Federal level (a)	Alberta	Manitoba (b)	New Brunswick (c)	Newfoundland (d)
2001			**CancerCare Manitoba (CCMB) established under the CancerCare Manitoba Act** CancerCare Manitoba is the 'provincially mandated cancer agency'; mandated to set strategic priorities and responsible for long-term planning for cancer services[73] CCMB is not a new agency; continues the Manitoba Cancer Treatment and Research Foundation as a corporation; CCMB provides clinical services including prevention, early detection, multidisciplinary cancer treatment, supportive and end-of-life care; also responsible for radiation protection[74]		
2002		**ACCC takes lead in developing a provincial cancer control plan** ACCCC to lead in response to pan-Canadian Strategy for Cancer Control and the 2001 Report by the Premier’s Advisory Council on Health for Alberta 'A framework for reform' for Alberta's health system ‘Mazankowski report’) [p. 33][75]	**Uniting Primary Care and Oncology (UPCON) Network established** UPCON designed to enhance partnerships between family physicians and the cancer system; aims to enhance knowledge of family physicians on cancer; improve communication and build relationships between family physicians and cancer specialists; improve integration of between primary and cancer care; promote the role of primary care within the cancer care system [p. 274][76] Initially funded for 3 years by CCMB through Health Canada Primary Health Care Transition Fund, then becoming a programme of CCMB and the CCMB Foundation [76]		
2003				**Cancer control accountability framework** Review led by a three person external review team/CAPCA and prepared at request of the Department of Health and Wellness; tasked with proposing “an organizational structure responsible for planning, funding and monitoring cancer services in New Brunswick with goals to improve access and coordinate cancer services across the province within an integrated cancer service delivery system” [p. 7][66], along with an implementation plan and budget. Recommends the formation of a (managed) New Brunswick Cancer Control Network to encompass key features of a provincial cancer agency but without requiring changes in regulation/legislation or transfer of budgets (as has been done in other provinces) Formulates a '2-year phased, four step implementation plan' with full development of the framework during 2005-2006; calculates total budget required for this period to be ~Can$ 2.5m[66]	
2004	**First Minister's meeting on the future of health care commits to reducing waiting times in select clinical areas including cancer care** Canada's First Minister's 10-Year Plan to Strengthen Health Care committed provinces and territories to establishing wait time benchmarks for the five priority areas to be achieved by 2007;	**Alberta Cancer Control Action Plan (ACCAP)*** ACCAP builds on 2002 Canadian Strategy for Cancer Control and existing programmes within Alberta as well as recommendations of the 2002 Mazankowski report; provides a framework for cancer control continuum at provincial level, setting out five priorities: (i) standards and guidelines; (ii) primary prevention; (iii)			

	Federal level (a)	Alberta	Manitoba (b)	New Brunswick (c)	Newfoundland (d)
	cancer-specific benchmarks included 4-week wait for curative radiotherapy (plus periodic screening for breast and cervical cancer)[77] Followed by commitment, in 2007, by provinces/territories to establish a 'Patient Wait Times Guarantee in at least one clinical area' (cancer radiation therapy, cataract surgery, cardiac care, joint replacement, and diagnostic imaging)[78]	integration and access to psychosocial, supportive, rehabilitative, and palliative care; (iv) human resource planning; (v) research [p. 37][75] According to Caron et al. ACCAP does not provide a timeline for implementation [p. 130][75] or specified targets or outcomes; unclear whether the plan includes any financial commitments towards implementation			
2006	**The Canadian Strategy for Cancer Control: A Cancer Plan for Canada (CSCC)** Prepared by the CSCC Governing Council; described as first national cancer control plan for Canada and the "result of seven years of consultation and collaboration between members of the health and allied professions, academia, the voluntary sector, all levels of government and the cancer patient and survivor community" [p. 3][69] Identifies 5 strategic investment areas for delivering on CSCC priorities, and within each 'Action Groups' tasked with defined activities ('business goals 2006-2010'): (i) Cancer Prevention and Early Detection (2 Action Groups); (ii) Supporting the Cancer Patient's Journey (3 Action Groups); (iii) Supporting the Cancer Workforce (1 Action Group); (iv) Encouraging Cancer Research (1 Action Group); (v) Improving Cancer Information and Access (3 Action Groups). Investments to be coordinated by Governing Council & managed by Action Groups[69]			**New Brunswick Cancer Network (NCBN) established** NBCN established as a branch of the Department of Health; charged with overseeing the "development and implementation of evidence-based provincial strategies for all elements of cancer care" [p. 2][79] While not explicitly mentioned, the establishment of NBCN seems to have followed the recommendation of the 2003 external review for a cancer control accountability framework	
2007	**Canadian Partnership Against Cancer established** Evolved from CSCC; created by federal government, with a mandate for initially 5 years to implement CSCC [80] Partnership established as non-profit corporation, and "the first disease-based organization funded at the federal level outside of government" [p. 70][81] Federal government renewed Partnership's 5-year mandate in 2011 for 2012-2017 with ongoing funding committed by federal government from 2016[80]		**Cancer Services in Manitoba. A Strategic Framework** Published by CCMB, the Framework builds on the principles of the 2006 pan-Canadian CSCC, aims to inform planning of and investment for cancer services in Manitoba for the period 2007 to 2012 Identifies 3 key areas for action, with defined priority actions for each: (i) cancer prevention (7 priority actions); (ii) early detection (5 actions); (iii) enhancing treatment options/improving care (16 actions) Does not provide details on implementation of strategy[82]		
2008		**Alberta Cancer Board integrated in newly created Alberta Health Services (AHS)** AHS replaces the existing nine regional health authorities, the Alberta Mental Health Board, the Alberta Cancer Board, and the Alberta Alcohol and Drug Abuse Commission; in 2009, AHS became a formal legal entity, responsible for health service delivery for the entire province; AHS established as a (single) regional health authority under the Regional Health Authorities Act[83]			

	Federal level (a)	Alberta	Manitoba (b)	New Brunswick (c)	Newfoundland (d)
		Cancer Radiation Wait Times guarantee established Mentioned in the 2008 budget only[84], nor further detail in implementation process available			
2009	**The System Performance Initiative. A First Year Report** CPAC's System Performance Initiative reports on cancer control indicators across Canada and along the cancer control continuum to provide stakeholders "with meaningful, actionable information" to inform policy and practice development [p. 5][85] 2009 report is first in a series of reports published annually (except 2013), with special reports in-between (focusing on specific cancers, such as lung (2011), populations (e.g. adolescents and young people, 2017) or quality dimensions (e.g. disparities 2014) [80]				**Commission of Inquiry on Hormone Receptor Testing (Cameron Inquiry)** Judicial inquiry into the conduct of the Newfoundland and Labrador Eastern Regional Health authority about the reporting of inaccurate and delayed test results to breast cancer patients between 1997 and 2005 and for failing to publicly disclose the full extent of the problem; highlighted wider system challenges around the provision of cancer care services, including fragmentation and access issues[86]
2010	**pan-Canadian Oncology Drug Review (pCODR) established by the provincial and territorial ministries of health** pCODR aims to "bring consistency and clarity to the assessment of cancer drugs in Canada"; since April 2014 part of Canadian Agency for Drugs and Technology in Health Established as a "collaborative platform for assessing new cancer drugs" across Canada[87] Prior to pCODR provinces/cancer agencies used their own approach to evaluating cancer drugs; pCODR process provides a single approach to cancer drug evaluation using the same evidence and principles; Quebec is not part of the Joint review			**New Brunswick Radiation Therapy Wait Time Guarantee established** Introduced following an agreement between the Governments of New Brunswick and Canada; guarantee ensures wait time for no more than eight weeks from being ready to treat with radiation therapy; also includes the development of a 'Provincial Cancer Treatment Access Repository' (CTAR) to monitor, manage and report on timely access to radiation therapy" [p. 2][79] Radiation Therapy Wait Time Guarantee is reported to have led to an increase in New Brunswick's treatment delivery capacity by ~40%; in 2011 NB had 7 linear accelerators (~7.9 per million people compared to Canadian average of 6.6 per million) [p. 28][79]	**Gaining Ground. A Provincial Cancer Control Policy Framework for Newfoundland and Labrador** Developed by NF government in collaboration with the Canadian Cancer Society and the regional health authorities[88] Establishes 9 policy directions: (1) Cancer Prevention Through Promoting a Healthy Population; (2) identifying Individuals at risk; (3) coordinating care; (4) supportive and palliative care; (5) clinical practice guidelines; (6) access and advocacy; (7) surveillance and information systems and technology; (8) education and training; (9) accountability and measuring success Does not mention specific financial commitments linked to the 9 policy directions
	Canadian Partnership for Quality Radiotherapy (CPQR) founded Established 'as an alliance' of three national professional organisations: the Canadian Association of Radiation Oncology (CARO), the Canadian Organizations of Medical Physicists (COMP) and the Canadian Association of Medical Radiation Technologists (CAMRT); financially and strategically supported by the federal government via Canadian Partnership Against Cancer (CPAC) CPQR's vision is "to support and promote the universal availability of high quality and safe radiotherapy for all Canadians through initiatives aimed at improving quality and mitigating risk"[89]				
2011	**First Nations, Inuit and Métis Action Plan on Cancer Control** Developed by CPAC in collaboration with the Advisory Committee on First Nations, Inuit and Métis Cancer Control; guided by an Advisory Committee consisting of First Nations, Inuit and Métis peoples, patients and organizations		**Manitoba Cancer Plan 2011-2015*** Plan identifies 5 goals, each with specific action plans: (i) prevention (5 action plans); (ii) access (6 action plans, including aboriginal populations, general access, wait times, participation in clinical trials, disparities); (iii) safety & patient-centred care (6 action plans, incl. evidence-based care, patient navigation);		**Cancer Patient Navigator Program launched** no further detailed information available[92]

	Federal level (a)	Alberta	Manitoba (b)	New Brunswick (c)	Newfoundland (d)
	involved in cancer control and chronic disease prevention. Identifies five strategic areas of focus, each with a specified goals and defined actions for 2011/12 (total of 7 actions): (i) community-based workforce skills and capacity, and community awareness; (ii) culturally responsive resources and services; (iii) access to programmes and services in remote and rural communities; (iv) patient identification systems; (v) leadership [90] Does not provide details on financing of plan		(iv) efficiency and effectiveness (6 action plans, incl. new models of care, increased physical infrastructure, electronic oncology health record, provincial Surgical Oncology Program, Provincial Oncology Drug Program); (v) education and research (3 action plans, incl. standardised access to educational opportunities for staff, establishment of Manitoba Cancer Research Centre) Actual document not available but described in some detail in the CCMB 2010/2011 Progress Report[91]		
			Manitoba Cancer Patient Journey Initiative (MCPJI) announced by CancerCare Manitoba and the province of Manitoba CCMB and the province pledged Can$ 40m over 5 years to shorten cancer patient journey from first suspicion to treatment within 60 days [ref: cancer strategy 2012-2017]; based on model created in the UK [p. 22][91] Identifies 7 strategies: (i) establish Manitoba Cancer Partnership Steering Committee to ensure that all parts of the system work together to deliver seamless access to care; (ii) implement tracking system to monitor and help cancer patients/ families through their journey; (iii) implement efficiency and quality improvement initiatives to reduce the wait times for testing, treatment and care; (iv) implement rapid diagnostic networks for rapid access to diagnosis and treatment; (v) enhance Community Cancer Program (CCP) services into hubs for cancer patient navigation and supportive services ; (vi) establish Vulnerable Population Cancer Control Program to improve access to cancer services; (vii) implement effective and efficient coordination, integration and transitions between care environments [93] MCPJI not documented separately		
2012	**Sustaining Action Toward a Shared Vision** Published by CPAC; as such it is not a pan-Canadian cancer plan, but presents the strategic framework for CPAC for 2012–2017 (coinciding with the renewal of CPAC's 5-year mandate); strategic framework describes "strategic priorities and core enabling functions" for the second phase of Canada's cancer strategy[94] Identifies 5 strategic priorities: (i) developing high-impact, population-based prevention and cancer screening approaches; (ii) advancing high-quality early detection and clinical care; (iii) person-centred perspective; (iv) targeted research; (v) cancer control with and for First Nations, Inuit and Métis communities along with 3 core enabling functions: (a) system performance analysis and reporting; (b) knowledge management through tools,	**Cancer Care one of 6 Strategic Clinical Networks (SCN) established in Phase 1 of SCN roll-out** Formation of Strategic Clinical Networks aimed "to support clinicians and all key provincial stakeholders in building the best-performing, publicly funded health system in Canada" [p. i][95] SCNs viewed as a 'mechanism' for AHS "to empower and support physician and clinical leaders" towards the development and implementation of "evidence-informed, clinician-led, team-delivered health improvement strategies" [p ii][95]; SCNs work through a 'collaborative membership model' towards a 'seamless' approach to service delivery spanning primary and specialty care as well as acute care and community care	**Manitoba Home Cancer Drug program launched** Follows 2011-2015 MCP; described as a programme enabling people with cancer accessing eligible outpatient oral cancer and specific supportive drugs such as anti-nausea medications, at no cost[74] Prior to the programme, patients tended to travel to hospital for treatment because of the high cost of drugs		**Cancer Transitions: Moving Beyond Treatment programme launched** no further detailed information available[92]

	Federal level (a)	Alberta	Manitoba (b)	New Brunswick (c)	Newfoundland (d)
2013	technology, connections and resources; (c) public engagement and outreach For each strategic priority and core enabling function the strategic framework presents a defined goal (desired outcome by 2017), a set of (timebound) strategies, specific measures and implementation partners[94]				
			Manitoba's Cancer Strategy 2012-2017 Cancer Strategy 2012-2017 is an updated strategy for cancer services, building on 2007 framework achievements; identifies 4 areas: (i) prevention and health promotion; (ii) screening and diagnosis; (iii) care and treatment; (iv) follow-up and survivorship; within each it the strategy describes specific areas for action; reiterates several initiatives listed in the 2011-2015 MCP - relationship between the 2 plans is not entirely clear Does not provide details on financing of plan implementation[93]		
		Changing Our Future: Alberta's Cancer Plan to 2030 Published by Alberta Health/Government; provides "a comprehensive planning framework for ongoing development of programs, activities, and services related to cancer" [p 4][96] Sets out 10 strategies for change, each with a set of (priority) actions: (i) establish CancerControl Alberta as distinct division within AHS (5 actions); (ii) streamline and standardise referral processes (6 actions); (iii) integrated prevention strategies (7 actions); (iv) early detection (4 actions); (v) advance care planning and targeted treatments (5 actions); (vi) cancer patient support (4 actions); (vii) cancer research (6 actions); (viii) strengthen cancer workforce (3 actions); (ix) health system infrastructure incl. new building & equipment (2 actions); (x) cancer surveillance and monitoring (5 actions) Further defines a set of performance measures (in place or under development) to track progress over time (total of 22 indicators) Implementation of the plan to be led by newly established CancerControl Alberta division within AHS Does not provide details on financing of plan implementation			
		CancerCare Alberta established as distinct division within Alberta Health Services Established as a priority action as identified in the 2013 cancer plan; envisaged as a focal point for a 'comprehensive and coordinated system' across the cancer control continuum and research[96]			
2014				**Cancer System Performance 2012** (f) **Published by NBCN** First report on New Brunswick's cancer system performance since establishment of NBCN[79]; reports series of indicators on prevention, screening/early detection, wait times, and	

	Federal level (a)	Alberta	Manitoba (b)	New Brunswick (c)	Newfoundland (d)
				outcome, among other indicators; followed by a second report published in 2019[97]	
2015			**Research Institute at CancerCare Manitoba established as joint initiative of CCMB and the University of Manitoba** Research Institute at CancerCare Manitoba established as a joint initiative of CancerCare Manitoba (CCMB) and the University of Manitoba; brings together basic sciences (cell biology), as well as clinical, health services and patient experience researchers[74](follows action outlined in 2011-2015 MCP)		**Minister Provides Update on Cancer Control Policy Framework** Statement given in the House of Assembly by the Minister of Health and Community Services Reports that a total of Can$ 172m had been invested in cancer control since ~2005; highlights the launch of the Cancer Patient Navigator Program (2001) and the Cancer Transitions programme (2012) [92]
2016			**2016-2021 Manitoba Cancer Plan (MCP)** 2016-2021 Manitoba Cancer Plan (MCP) was developed by CancerCare Manitoba with aim to provide a 'comprehensive plan to deliver the best cancer services'; informed by CCMB 2013-2014 Community Health Assessment[98] Identifies six goal-oriented strategic directions and a total of 27 specific objectives: (i) state-of-the-art patient care (incl. access to advances in radiation therapy, novel systemic therapy, leadership in cancer surgery, participation in clinical trials); (ii) timely access to multidisciplinary care; (iii) reporting on performance, quality and safety; (iv) capacity building; (v) improved care for underserved populations; (vi) research Includes a 'Capital facilities development plan': (i) construction of a new clinical care and research facility, integrated with the CCMB MacCharles site; (ii) upgrading of St. Boniface site through major renovation of Patient and Family Resource Centre to improve emotional support for patients; (iii) regular updating and replacement schedule for specialised radiation therapy equipment [p. 9][98] Does not include financial details on planned initiatives		
2017	**The Canadian Strategy for Cancer Control: 2017–2022** Published by CPAC, follows the 2016 renewal of CPAC's 5-year mandate by the federal government; identifies five themes to guide CPAC's work for 2017-2022, and continuing and evolving initiatives as well as new opportunities within each theme: (i) quality; (ii) equity; (iii) seamless patient experience; (iv) maximize data impact; (v) sustainable system [99] Followed by a 'refresh' and modernisation of the CSCC on request by the federal Minister of Health, leading to publication of 'Canadian Strategy for Cancer Control 2019–2029' in 2019[100]	**Cancer Provincial Advisory Council established by AHS** Aim of the Advisory Council is to provide advice to AHS Board on service delivery and programmes 'for a province-wide cancer system'; members include clinical experts and members of the public with cancer/have family members with cancer/work in the cancer field[101] Council priorities as per 2018-19 Annual Report include: "- Support the implementation of Alberta's Cancer Plan to 2030 through advice to AHS CancerControl Alberta to enhance cancer services for all Albertans. - Represent the patient voice with community perspectives and thoughtful engagement - Engage with Health Advisory Councils, Provincial Advisory Councils, Wisdom Council			

	Federal level (a)	**Alberta**	**Manitoba (b)**	**New Brunswick (c)**	**Newfoundland (d)**
		and the public to harness patient and community perspectives - share lived experiences and perspectives with Alberta Health Services" [p. 6][102]			
2018 and after	2019–2029 Canadian Strategy for Cancer Control				

Note. Green colour – ‘event’; orange colour – published cancer plan or strategy; blue colour – evaluation, progress report or cancer system review

(a) Cancer services provision is a provincial responsibility and cancer control programmes at provincial level have mostly been within provincial cancer agencies. Nature and scope of cancer agencies varies across provinces; (b) Manitoba established, in 1978, a Community Cancer Program Network, "to minimize the disruption cancer imposes on patient’s lives by providing cancer care closer to home" (p. 11); comprises of 7 Regional Cancer Programs and 8 Community Cancer Programs (CCPs), the Western Manitoba Cancer Centre (WMCC), and the Community Cancer Resource & Support Program (CCRSP) [74]; (c) New Brunswick is among the provinces that does not have a formal cancer agency, the NBCN was established in lieu of a formal cancer agency. There appears to be no formal cancer control strategy that has been published. Information that is publicly available is patchy.; (d) Newfoundland does not have a dedicated cancer agency or identified body responsible for cancer services. Information that is publicly available is patchy.

Supplement Table S.3. Evolution of cancer strategies: Canada (continued)

	Nova Scotia (e)	Ontario	Prince Edward Island	Quebec	Saskatchewan (f)
1995	**Nova Scotia Cancer Action Committee established by Department of Health and Wellness** Cancer Action Committee tasked with developing an action plan for coordinated and systematic approach to cancer care[75]	**Provincial Cancer Network created** Follows from the 1994 publication by the Ontario government 'Life to Gain, the cancer strategy for the province' mandate to develop a broad framework of cancer services in Ontario Network recommendations published in a 1995 provincial Cancer Action Plan (internal document[103]; recommends creation of CCO "to monitor and coordinate the provincial cancer control system" [p. 29][75]			
	Cancer Treatment and Research Foundation of Nova Scotia incorporated into newly established Queen Elizabeth II Health Sciences Centre Merger followed the 1995-1996 Queen Elizabeth II Health Sciences Centre Act[104] CTRFNS was created in 1980 as stand-alone health care organisation tasked with, among others: - establishing and coordinating multidisciplinary referral facilities for diagnosis and treatment of cancer; cancer research; raising public awareness about early diagnosis and treatment of cancer; supporting education and training for medical and technical personnel; funding research and training fellowships; providing a central tumour registry [p. 4-5][105]				
1996	**Cancer Care Nova Scotia: A Plan for Action. The comprehensive, integrated, accountable cancer management strategy*** submitted by the Cancer Action Committee to Deputy Minister of Health Makes 20 recommendations under 8 priorities, including the creation of a "governing organization to coordinate, strengthen and evaluate the cancer system" [p. 40][75]; establishing tumour groups to develop clinical practice guidelines and cancer treatment policies; strengthen the role of the family physician in cancer care coordination; cancer research; standards for cancer facilities/ programme approval and review The Government responded to most recommendations by creating Cancer Care Nova Scotia (CCNS), setting up Cancer Site Teams (tumour groups), developing, implementing and evaluating a Patient Navigation Program; publishing a Cancer District Program model; and building a Cancer Patient Family Network[75]				
1997		**Cancer Care Ontario (CCO) launched** Originally established as 'Ontario Cancer Treatment and Research Foundation' in 1943; launch as CCO follows the appointment, in 1996, of a transition team to implement a new provincial framework for cancer care			

	Nova Scotia (e)	Ontario	Prince Edward Island	Quebec	Saskatchewan (f)
		Tasked with coordinating and integrating cancer treatment services across the province[103]			
1998	**Cancer Care Nova Scotia (CCNS) established by DHW as provincial programme** Reports to Deputy Minister of the Department of Health and Wellness (DHW) Mandate: primary advisor to Minister and DH on cancer system, cancer control and cancer care; provide leadership, analysis and evaluation of cancer system including guidance and planning advice on programmes, facilities and evaluations; establish provincial policies for cancer care and treatment; advise on policies, standards, and guidelines; review and advise on cancer programme operating plans and budgets in facilities; make recommendations for funding of capital projects, major equipment purchases and human resources; develop programmes along the cancer control continuum; cancer data collection and cancer registry operation [p. 83/84][75] From April 2004 defined as a programme of DHW[75]			**Quebec Cancer Control Program (PQLC)** Prepared by Cancer Advisory Committee (established in 1993) in 1997 and adopted by the Quebec government in 1998; described as “Québec’s first comprehensive cancer control strategy” [p. 153][75] Defines 3 strategic directions: (i) a global approach to cancer control (population-level and individual level planning; considering the continuum of services); (ii) patient-centredness; (iii) quality; and 3 types of recommendations, relating to (i) organisational means to enhance service delivery (a total of 34 recommendations), (ii) proposed objectives around health promotion (n=11) and (iii) evidence-based quality criteria. [p. 316-320][75]	
				Quebec Cancer Control Council (CQLC) established at the Ministry of Health and Social Affairs (MSSS) Set up with the mandate to “(1) advise the Minister of Health and Social Services on cancer control issues and priorities; and (2) promote cancer control by facilitating knowledge transfer to the cancer control community” [p. 153][75]	
1999			**Initial PEI Cancer Control Committee formed** Bringing together Canadian Cancer Society, PEI government and the community; followed series of meetings initiated by the Canadian Cancer Society, PEI Division, which began, in 1998, to bring together stakeholders concerned about cancer control and surveillance in Prince Edward Island Aim was “to promote a comprehensive approach to cancer control and assessment of the capacity already available on Prince Edward Island” [p. 15][106]		
2000				**Radiation Oncology in Quebec: 2000-2008 Action Plan*** Prepared by the Radiation Oncology Committee highlighting shortages in radiotherapy staff and equipment Defines 2 goals (balance between supply and demand; access to quality services); 4 recommendations: (i) increase effectiveness of existing radio-oncology centres in Quebec including equipment replacement and addition of 16 new machines by 2008 as well as	

	Nova Scotia (e)	Ontario	Prince Edward Island	Quebec	Saskatchewan (f)
				necessary staffing; (ii) build 4 new radio-oncology centres; (iii) implement workforce planning recommendations; (iv) mandate Radio-oncology Coordination Center to implement and monitor action plan [p. 320-321][75]	
2001		**Report of the Cancer Services Implementation Committee** Set up in 2001 in response to “public concerns about waiting lists for radiation therapy, and the ability of the current system to meet the growing need for cancer services” [p. 1][107] Tasked to examine cancer services in Ontario and make recommendations to improve the integration of cancer services at local level in Ontario Recommends that role of CCO should be strengthened as principal advisor to the ministry and focus on/be accountable for the strategic direction of the cancer services system; standards and guidelines development; monitoring system performance through establishing a Cancer Quality Council; ensuring timely and equitable access to care; ensuring effective use of resources along the continuum of cancer services (CCO would no longer be responsible for the direct delivery of cancer services) [p. iii][107]		**Coordination Center for Cancer Control in Quebec (CCLCQ) established at the MSSS** Created with the aim to coordinate existing resources for cancer control and also to lead on the implementation of the PQLC by regional authorities[75] **Priority Cancer Coalition in Quebec established** Created by a group of “voluntary, community, and professional organizations” to “mobilize all stakeholders and the government in advancing cancer control in Quebec” [p. 153][75], asking the government to prioritise cancer control and advance implementation of the PQLC	
2002		**Cancer Quality Council of Ontario (CQCO) established** Set up as quasi-independent body to “monitor and report publicly on cancer system performance in Ontario” and to “recommend targeted quality improvement to the Minister of Health through Ontario Health’s Board of Directors” (mandate expanded in 2009 to include international comparisons) reports to Ontario Health's Board of Directors and the Ministry of Health; has independent oversight role secretariat housed at CCO[108]]	**Formation of Prince Edward Island Cancer Control Strategy Advisory Committee** Aim of the Committee is “to provide guidance to develop a provincial cancer control strategy to be integrated with [CSCC]” [p. 15][106] Membership drawn from a wide range of stakeholders, including government, providers, cancer society, patients/carers Costs for strategy development shared between PEI Department of Health and Social Services and the Canadian Cancer Society, PEI Division		**Saskatchewan Surgical Care Network established** Network tasked with implementing Canada's "first comprehensive system to rate and track all patients waiting for surgery" [p. 1526][109], with an initial focus on (i) patients waiting for cancer surgery and (ii) patients who have been waiting the longest overall and a goal to complete 95% of cancer surgeries within 3 weeks (and complete all surgeries for those waiting over 18 months)
2003		**Cancer 2020: Targeting Cancer: an action plan for cancer prevention and early detection*** Action plan for cancer prevention and early detection prepared jointly with the Canadian Cancer Society Identifies prevention targets aimed at reducing behaviours that increase risk, and screening targets aimed at early detection within 5-year implementation timeframe[110]]		**Ministerial Cancer Working Group established** Mandated to make recommendations on how to improve “the management and impact of the PQLC”; Working Group report ‘Unifier notre action contre le cancer’ published in 2004 formed the basis for a three-year working plan (2004-2007); report (not available) identified 6 priority measures, each with a set of specific recommendations: (i) integrated service delivery; (ii) clinical governance; (iii) continuous quality improvement; (iv) unified	

	Nova Scotia (e)	Ontario	Prince Edward Island	Quebec	Saskatchewan (f)
2004				system governance; (v) implementation; (vi) funding [p. 153 and 319-326][75]	
		Strengthening the Quality of Cancer Services in Ontario Inaugural report of the CQCO providing an assessment of the quality of cancer services in Ontario and identifying gaps in the ability to measure quality[111]		**Cancer Control Directorate (DLCC) established at the MSSS** Created within the ministry to replace CQLC and CCLCQ, with a Cancer Control Director to be appointed[75]	
		Gaining Access to Appropriate Cancer Services: A Four-Point Strategy to Reduce Waiting Times in Ontario Published by Cancer Quality Council of Ontario; proposed approach includes: (i) reducing demand for services by lowering the risk of developing cancer and promoting early detection; (ii) increasing supply of cancer resources in Ontario; (iii) coordinating access to cancer services; (iv) increasing efficient use of existing cancer resources Role of the document unclear; does not provide any specific financial figures in terms of investments required[112]	**Partners Taking Action: A Cancer Control Strategy for Prince Edward Island 2004-2015** Prepared by Prince Edward Island Cancer Control Strategy Advisory Committee and informed by Canadian Strategy for Cancer Control, but focused on addressing PEI's specific needs and organized around 6 areas: (i) prevention, (ii) screening and diagnosis, (iii) treatment and supportive care, (iv) palliative and end-of-life care, (v), survivorship, (vi) research and surveillance; strategy identifies specific objectives, action areas and timebound targets (by 2015) and indicators for each area although specific targets are not quantified in addition to specific actions includes 7 main recommendations: (i) ongoing financial commitment to all aspects of cancer care; (ii) 'aggressive' recruitment and retention of clinical and technical staff; (iii) enhanced access to primary care; (iv) electronic patient records; (v) improved access to drugs for cancer treatment and palliation; (vi) behavioural and epidemiological research; (vii) continued role of the Cancer Control Advisory Committee "to facilitate continuing collaboration and to oversee and implement the strategy's recommendations" [p. 117][106] does not provide information about financing of the strategy		
		Ontario Cancer Plan 2005-2008 Published by CCO; a three-year action plan and "roadmap for the province's new cancer system' with a focus on building system capacity[103]; described as the "first comprehensive cancer plan for Ontario and the first of its kind in Canada" [p. 6][113] Sets out 6 priorities for action, with action plans identified for each: (i) provincial standards and guidelines; (ii) regional cancer programmes; (iii) closing the gap between demand and capacity; (iv) rapid access strategies; (v)performance measurement and accountability; (vi) cancer research Sets out detailed funding requests **Aboriginal Cancer Strategy (2004–2009)*** Published by CCO; addresses the inequities, variations and disparities experienced by First Nations, Inuit and Métis peoples in Ontario[103]			

	Nova Scotia (e)	Ontario	Prince Edward Island	Quebec	Saskatchewan (f)
2005		**11 new Integrated Cancer Programs (ICPs) created** ICPs arose from “the voluntary integration of regional cancer centres with their ‘host’ hospitals and the introduction of a new performance management relationship with Cancer Care Ontario” [p. 4][113] Use of Integrated Cancer Program (ICP) Agreements, which 11 hospital boards signed with CCO CCO’s role moved from day-to-day management of cancer centres to oversight at system level **Regional Cancer Programs established by CCO** Funded by CCO; responsible for ‘implementing provincial standards’ and cancer care programmes, coordinating care across providers, improving access to and quality of cancer services They are (13) networks of hospitals and other organisations involved the provision of services along the cancer control continuum within each of the province’s 14 Local Health Integration Networks; each is led by a Cancer Care Ontario Regional Vice President (RVP) [114] Progress is monitored through (i) quarterly reports with each RVP; (ii) a Regional Cancer Program performance scorecard; (iii) Cancer System Quality Index[115] **Cancer System Quality Index launched** described as a “a publicly accessible, online report of the cancer system’s performance” using 30 indicators spanning the cancer control and care continuum [p. 27][116]			
2006	**CCNS Commissioner resigns** Commissioner appointed to develop programme (with Chief Operating Officer working alongside), not a separate legal entity; hosted by Queen Elizabeth II Health Sciences Centre in Halifax; post to be re-staffed until 2010				**The Cancer Agency Act** Replaces the Cancer Foundation Act of 1979 which established the Saskatchewan Cancer Foundation, to be continued as Saskatchewan Cancer Agency as a non-profit corporation; “responsible for the planning, organization, delivery and evaluation of cancer care services throughout Saskatchewan” [p. 6]; including direct service delivery[117]
2007	**Provincial health services operational review** Commissioned by DHW; recommends several changes to CCNS including: confirming the role of the Commissioner; define and agree on authority of CCNS; invest in level of care model; identify core service requirements at provincial and local levels; develop research plan; establish "visible commitment for funding and administrative authority"; increase coordination and communication with DHW; support Development of Innovative Care Delivery and Evaluation Models [p. 336-7][118]			**2007-2012 Priority Directions of the Quebec Cancer Control Program** Published by DLCC; 5-year action plan with 60 measures “to further improve the quality, accessibility and continuity of cancer control services” Identifies five priority areas, each with specific objectives and measures to assess progress against: (i) consolidate foundations for integrated service organisation (3 objectives); (ii) health promotion, prevention and early detection (4); (iii) cancer patient journey along the continuum (5); (iv) evidence-based practice in cancer control (6); (v) measure achievement against outcomes (2)[75]	

	Nova Scotia (e)	Ontario	Prince Edward Island	Quebec	Saskatchewan (f)
2008		**Ontario Cancer Plan 2008-2011** Published by CCO and Action Cancer Ontario; organised around 6 goals: 1. reduce incidence of cancer, 2. effective screening and earlier detection, 3. timely access to effective diagnosis and high-quality cancer care, 4. improve the patient experience along cancer journey, 5. performance of Ontario's cancer system, 6. translate cancer research; each goal is supported by specific initiatives, with 4 key initiatives identified: (i) transforming cancer screening, (ii) speeding up cancer diagnosis, (iii) continuing developing regional cancer programmes, (iv) responding to new developments in molecular oncology Makes specific commitments under each goal, e.g., under goal 3, plan details plans for constructing additional 6 regional cancer centres with a total of 14 radiation machines plus 2 mobile radiation units (these come in addition to the existing 12 regional cancer centres with a total of 81 radiation machines) as well as roll-out of IMRT to all regional cancer centres[116]			
2009		**Regional Systemic Treatment Program (RSTP) provincial plan*** Builds on plans of the 13 Regional Cancer Programs around chemotherapy standards planning, funding, and health human resources to meet the increasing demand for ambulatory systemic treatment in Ontario Actual document not available; according to 2014-2019 Systemic Treatment in Ontario report it led to establishment of regional systemic treatment programmes across Ontario to establish a coordinated approach to patient focused care[119]	**Partners making progress: A report on Prince Edward Island's Cancer Control Strategy 2004-2008** prepared by the PEI Cancer Control Strategy Committee (government and non-government partners)[120]		
2010	**CCNS Chief Medical Director recruited** appointed "to assume executive responsibilities along with the Chief Operating Officer" [p. 333][121] no further detail available		**Provincial Cancer Patient Navigator Program begins** reported in [122]	**Central mechanism for managing access to radiation oncology reference framework** Published by DLCC; guide for authorities mandated to implement a mechanism for managing access to radiation oncology services in Quebec Describes the responsibilities of all stakeholders involved in the process (national, regional and organisational level), and proposes a detailed model to ensure access to radiation oncology Target is set by MSSS 2005-2010 Strategic Plan; specifies eight-week maximum wait time for radiation oncology treatment from the date patients are considered medically ready[123]	
2011		**Ontario Cancer Plan 2011-2015** Published by CCO; builds on previous 2 plans and in keeping with the same 6 overarching goals and with 6 identified strategic priorities: (i) focused approach to cancer risk reduction; (ii) integrated cancer screening; (iii) accessible, safe, high-quality health care; (iv) patient experience; (v) innovative models of care delivery; (vi) personalised medicine[115]		**Quebec Cancer Directorate (DQC) created within MSSS** Replaces DLCC; reports directly to the Deputy Minister of Health; its vision is "to set up, in collaboration with its partners, an integrated and functional network, which ensures excellence in the care and services for people suffering from cancer or in whom cancer is suspected as well as their relatives" [p. 2][124]	**Strategic Plan 2011-2014** Published by SCA; 3 page document; commits to 4 strategic directions: client, patient and family experience along the cancer journey; access to care; improve quality, safety and accountability; prevention and early detection; formulates set of goals for each direction but not specific actions[125]

	Nova Scotia (e)	Ontario	Prince Edward Island	Quebec	Saskatchewan (f)
					Does not provide details on financial commitments
2012		**Aboriginal Cancer Strategy II** Developed by Ontario's Aboriginal leaders and CCO; forms component of the broader Ontario Cancer Plan III; identifies 6 strategic priorities: 1. Build productive relationships; 2. Research and surveillance; 3. Prevention; 4. Screening blitz; 5. Supportive care; 6. Education; each with defined objectives to be achieved by 2015 and related actions[126] Led to signing of 'relationship protocols' between CCO and six Aboriginal groups, which outline mechanisms of working together to address rising cancer burden among First Nations, Inuit and Métis communities 'in a way that honours the Aboriginal path to well-being' [127]		**Quebec Cancer Network (Réseau de cancérologie du Québec, RCQ) established** RCQ brings together wide range of stakeholders, including cancer patients/their carers Further developed in the 2013 Master plan, which envisages the RCQ as a 'network of networks' with 3 levels: (i) national level coordinated by DQC of thematic committees by cancer site, discipline or particular theme; (ii) regional level with departments responsible for oncology to coordinate and support regional / interregional communities of practice; (iii) local (local networks, RLS) and organisational level, with a designated department responsible for oncology[128]	
2013			**Catastrophic Drug Program launched** reported in [122]	**Central mechanism for managing access to oncological surgery reference framework** Published by DQC; similar to the 2010 guide for access to radiotherapy the document specifies the roles and responsibilities of stakeholders involved in oncological surgery Target for access to oncology surgery is that 90% of medically ready patients be operated on within 28 days and 100% within 56 days[129] **Cancer Master Plan** Published by DQC; describes Quebec's cancer network and serves as guide to increase coordination, cooperation, collaboration and communication between all cancer stakeholders and between the levels of the system, health and social services Builds on and expand aims of the 1998 PQLC, with a specific focus on 5 themes: (i) care and services focused on the needs of patients and the population; (ii) dynamic links between actors in oncology; (iii) early intervention against cancer development; (iv) accessibility and quality of care and services; (v) the availability of information for action[128] **Cancer Action Plan 2013-2015** Published by DQC; accompanies the Cancer Master Plan and includes activities as basis for the governance and operation of the RCQ at the different tiers of the Quebec health system Overarching goal is to increase coordination, consultation, collaboration and communication between all stakeholders in cancer services in Quebec Forms part of DQC's strategic planning, structured around five priorities, each with identified objectives, actions and expected results: (i) care and services focused on the needs of patients and the population (3 objectives, 13 actions); (ii) early intervention (2	

	Nova Scotia (e)	Ontario	Prince Edward Island	Quebec	Saskatchewan (f)
				objectives, 14 actions); (iii) access to diagnosis (3 objectives, 6 actions); (iv) quality of care and services (6 objectives, 15 actions); (v) networks (5 objectives, 17 actions)[130]	
2014		**Systemic Treatment Provincial Plan 2014-2019** Developed by CCO in collaboration with healthcare providers, administrators, and patient and family advisors Builds on 2009 plan with a focus on person-centred approach to improve safety, quality and accessibility of systemic treatment Describes 9 strategic priorities for 2014-2019 around enhancing quality and safety of oral chemotherapy, enhanced toxicity management, access of chemotherapy in people's home, coordination and communication, among others[119]	**Provincial Cancer Coordination Steering Committee formed** Established by Department of Health and Wellness and Health PEI; includes physicians, administrative leads, community partners and patient advisors representing the cancer control continuum; mandate to "develop, implement and monitor a three-year strategic plan for cancer control in PEI" [p. 5][122]	**Advisory Committee on the performance of the National Cancer Programme formed** Comprised, mainly, of representatives of the Cancer Network and the MSSS, plus an academic expert and a representative of the population; mandate to "provide the Ministry and the network with a comprehensive and integrated monitoring system for the performance of the National Cancer Program" [p. 1] [131]	
		Navigating the Diagnostic Phase of Cancer: Ontario's Strategic Directions 2014-2018 Published by CCO; described as the "first strategic plan in Ontario focused on taking a holistic approach to improving the diagnostic phase of cancer" [p. 3][132] Identifies 4 priorities: (i) scope of diagnostic assessment programmes; (ii) models of navigation for patients during diagnostic phase; (iii) patient transitions along pathway; (iv) quality improvement during diagnostic phase	**Provincial Cancer Coordinator position created** Aim of the role is to support the development of a new cancer strategy for PEI[122]		
2015		**Ontario Cancer Plan IV 2015-2019** Published by CCO; formulates 6 goals and a set of strategic objectives for each: (i) quality of life and patient experience; (ii) safety; (iii) equity; (iv) integrated care; (v) sustainability; (vi) effectiveness. Goals differ from previous ones in that they look at broader system level factors rather than being organised along the cancer patient journey Similar to the 2011-2015 plan also formulates what is expected to be achieved by the end year of the plan (2015) In contrast to earlier plans does not provide any data on financial commitments[133]			**2015-20 Strategic Plan** Published by SCA (updated in 2019); 4 page document; identifies 4 strategic directions and associated goals: (i) better teams (leadership/talent management and engagement); (ii) better health (health promotion early detection, research); (iii) better care (access and effective treatment programmes); (iv) better value (sustainability, continuous improvement, fund development/facility investment) Specifies key performance indicators, phased targets (2020; 2017-18) and initiatives for each strategy/goal Sets 2020 target of "Arms-length foundation in place and raising $6 million annually"[134] SCA annual reports from 2015/16 provide financial data but these relate to annual spend by the agency and do not disaggregate for investment related to the strategic plan specifically
		Aboriginal Cancer Strategy III 2015-2019 Described as an important strategic objective Ontario Cancer Plan IV; retains the same strategic priorities of Aboriginal Cancer Strategy II, formulates objectives to be achieved by 2019 and actions to be taken for each[127]			

	Nova Scotia (e)	Ontario	Prince Edward Island	Quebec	Saskatchewan (f)
2016	**CCNS transferred to the newly established Nova Scotia Health Authority (NSHA)** Follows reorganisation of DHW reflecting the 2015 'amalgamation of nine DHAs into a single provincial health authority"; until then CCNS (and other programs) had a 'bifurcated nature' in that it had components at both DHW and DHA level [p. 42] [135]		**PEI Cancer Strategy 2016-2019** Prepared by Provincial Cancer Coordination Steering Committee Overarching goals are the same as in the 2004 Cancer Control Strategy Identifies 2 overarching priorities: (i) coordination of cancer control in PEI and (ii) cancer research and surveillance as well as 6 cancer control continuum priorities: 1. prevention/health promotion; 2. screening/early detection; 3. diagnosis; 4. treatment; 5. patient support and follow-up care; 6. palliative and end-of-life care), with defined 12 objectives and recommended actions covering all priority areas[122] does not provide information about financing of the strategy	**Cancer Action Plan 2016-2017** Published by DGC; continues the 2013 Master plan and further consolidates actions set out in the 2013-2015 Action plan; structured around 7 main priorities, each with identified objectives and expected results: (i) quality (safety, continuity and relevance) of cancer care and services (9 objectives); (ii) accessibility of cancer care and services (6 objectives); (iii) health promotion, cancer prevention and screening (4 objectives); (iv) efficient organization of cancer care and services (3 objectives); (v) patient-centred care and services (2 objectives); (vi) cancer surveillance (1 objective); (vii) cancer networks by tumour site (2 objectives)[136]	
				Report of the Advisory Committee on the approach to improving and maintaining the performance of the National Cancer Program Published by DCG; contains recommendations for setting up a national process to measure and assess the performance of cancer care and services. Among the committee's recommendations are 31 indicators aimed at measuring the performance of cancer care and services (accessibility, quality and optimal use of resources), the structural conditions of the Quebec health network, state of health and well-being. of the population affected by cancer as well as determinants other than the public system[131]	
2017			**PEI Cancer Strategy Annual Progress Report 2016-2017** Published by Health PEI; provides overview of progress of 2016-2019 PEI Cancer Strategy[137]		
2018 and after		Ontario Cancer Plan 5. 2019-2023			

Note. Green colour – 'event'; orange colour – published cancer plan or strategy; blue colour – evaluation, progress report or cancer system review

(e) Very limited recent published information on cancer strategies and policies across Nova Scotia; (f) Saskatchewan Cancer Agency is funded by the provincial government; also known as Saskatchewan Cancer Foundation; responsible for province-wide programmes for the prevention, diagnosis, treatment and follow-up of cancer; very limited recent published information on cancer strategies and policies across Saskatchewan

Supplement Table S.4. Evolution of cancer strategies: Denmark, Ireland, New Zealand and Norway

	Denmark	Ireland	New Zealand	Norway
1995			**Cancer Control Services in New Zealand: Developing a National Implementation Strategy** Prepared by Coopers & Lybrand consultancy for the Ministry of Health[138] Identifies 6 overarching goals and a total of 14 objectives around (i) health promotion and cancer prevention; (ii) early detection; (iii) access to treatment; (iv) palliative care; (v) information and research; (vi) Maori concerns are addressed throughout Ministry of Health identified to have an oversight role with responsibility for developing cancer control policies (with identified tasks for 8 of the 14 objectives) Regional Health Authorities allocated responsibilities for ensuring that “appropriate services are purchased at the local level” [p. 19[138]] (12 objectives), along with other agencies as well as providers Document set out to provide an assessment for further consideration by key stakeholders	
1996		**Cancer Services in Ireland: A National Strategy** Published by the Department of Health Builds on 1994 national health strategy ‘Shaping a Healthier Future’ which aimed to re-orient the Irish health system towards reducing premature mortality from, among others, cancer by 15% over 10 years from 1994 Specific aims are focused on (i) effective prevention and appropriate screening; (ii) good diagnostic practice; (iii) effective primary care; (iv) well developed treatment services; (v) responsive counselling and follow-up for patients; (vi) clear communication between medical staff and patients Defines 9 specific objectives around prevention, information, early detection, access, quality, treatment, coordination, cost-effectiveness and research and education[139]		**National Cancer Plan Selection Committee established** Appointed by the Ministry of Social Affairs and Health; tasked to review the cancer challenges in Norway, incl. cancer treatments, outline a comprehensive strategy for the prevention, treatment, rehabilitation, care and care of people with cancer; discuss responsibilities and measures of municipalities, county municipalities, health regions and the national level; explain the administrative, personnel and financial consequences of the proposals, among others[140]
1997		**Dedicated budget allocated to cancer services** Described as “Perhaps one of the most notable achievements of the National Cancer Strategy”, involving the separation of the cancer development budget from the acute hospital budget, ensuring “that dedicated funding was made available specifically for cancer services” with changes to the additional funding trackable over time [p. 27][141]		**National Cancer Plan (NOU)** Prepared by the National Cancer Plan Selection Committee, published by the Ministry of Social Affairs and Health[140] Sets out a range of premises upon which the cancer plans action points are based, incl. equality in access, quality of cancer care, address the entire spectrum of needs, responsibility of all actors, etc. Defines 20 measures or actions, each with specified milestones, around primary prevention (incl. reducing tobacco use); establishment of a health technology assessment unit by 1999; guidelines for the detection and treatment of hereditary cancer; expansion of screening programmes; strengthening pathology capacity; investment in diagnostic and therapeutic equipment; establishment of quality monitoring; waiting list regulations; establishment of regional cancer councils by 1999; regionalisation of cancer services & centralisation of surgery; palliative, end of life care and survivor support; clinical trials and research; workforce capacity and training; implementation; data 5-year action plan for cancer with project secretariat established at MoH to oversee implementation

	Denmark	Ireland	New Zealand	Norway
1998	**Cancer Steering Group established by Minister of Health** Set up in response to public debate about quality of cancer treatment and results in DK compared to neighbouring countries; aim of steering committee was to "highlight the opportunities for improvement of cancer treatment in Denmark, with a view of reducing mortality due to cancer"[142] Tasked with advising the Danish Health Authority on matters relating to cancer; and at end of 1998 to draw up a National Cancer Plan			**National action plan for strengthening cancer care** 5-year commitment and a national strategy to better cancer care, based on NOU 1997; presented by the government to the National Assembly[143] Specifies further actions set out in the 1997 Cancer Plan; in 2 parts, with part 1 proposing a 5-year action plan for better cancer care with a budget of just over NOK 2 billion, part 2 proposes additional subsidies of NOK 2.3 bn over 5 years for equipment in hospitals; action plan aimed a 'specific bottlenecks', prioritising: (i) increased resources for cancer prevention; (ii) increased emphasis on early diagnosis / screening; (iii) increased radiation treatment capacity (from 22 to 36); (iv) nursing and care services for terminally ill and dying people; (v) increased competence in palliative care; (vi) measures to promote cooperation across administrative levels; (vii) measures to improve access to health personnel, reorganization of radiography and radiation therapy education; (viii) increased funding for research
				30-day assessment guarantee introduced Applies to all referrals to public hospitals or outpatient clinics to ensure that all patients are assessed within 30 working days of the referral from a general practitioner; all patients with suspected cancer entitled to further examination within the assessment guarantee, ie within 30 working days[143]
1999	**National Cancer Plan, Synopsis sub-report 1, Radiotherapy 1999** Recommendations of the sub-report on radiotherapy are summarised and updated in the National Cancer Plan I[144]	**Ireland-Northern Ireland-National Cancer Institute Cancer Consortium (All-Ireland Cancer Consortium, AICC) launched** A trilateral partnership between the Irish DH, the Northern Ireland DH and the National Cancer Institute in the US; established at a cancer conference in Belfast in 1999; works on joint programmes in education/scholarship exchange, cancer registration, information technology, and clinical trials in an effort to advance cancer care and research[145] According to Lewison et al. (2020), the consortium "delivered significant additionality on the island of Ireland, promoting transnational cooperation, enhancing cancer research activity, and underpinning improved cancer services and better cancer outcomes" [p. 15][146]	**Cancer Control Workshop** Initiated by the Cancer Society of New Zealand with the aim to develop a process for developing a cancer control strategy for New Zealand Workshop represented a wide range of stakeholder perspectives and expertise; recommended that a national cancer control plan should be established; the "National Cancer Control Strategy Steering Committee should continue, and co-opt additional members where necessary"; and the that Steering Committee establish a taskforce to drive the initiative [p. 10][147]	
2000	**National Cancer Plan. Status and proposals for initiatives related to cancer treatment (National Cancer Plan I)** Prepared by the Cancer Steering Group[142] Based on a review of cancer burden and cancer system sets out recommended activities under 10 headings: (i) prevention; (ii) training of health care staff; (iii) contact and referral; (iv) organisation of diagnostics and treatment; (v) expansion of diagnostics and treatment capacity; (vi) concentration of surgical treatment expertise; (vii) screening; (viii) research and development; (ix) rehabilitation; (x) palliation The publication of the Cancer Plan was accompanied by a set of additional recommendations, including the 1999 sub-report on radiotherapy; and reports on scanner capacity expansion (2000); on decentralisation of radiotherapy (2001) and on health staff training in cancer treatment (2001), developed by a working group set up in 1999 as part of the preparations for the plan	**National Cancer Forum established** Set up as national advisory body on cancer policy to the Minister of Health and Children Originally proposed as part of the 1996 Cancer Strategy [p. 50][148] Terms of Reference as per 2006 Cancer Strategy defined Forum's role as advising the Minister on progress in National Cancer Strategy implementation; coordination of cancer services at supra-regional and national level; development and implementation of protocols for cancer treatment and care; evaluation of the effectiveness and quality of cancer services; coordination of research into cancer, in conjunction with the Health Research Board [p. 4][149]		

	Denmark	Ireland	New Zealand	Norway
2001		**Expert Working Group on the Development of Radiotherapy Services** Established by the Minister for Health and Children, tasked to "undertake an assessment of need in relation to radiotherapy services [and] to make recommendations on the future development of radiotherapy services" [p. 3][150]	**Improving non-surgical cancer treatment services in New Zealand** Published by Ministry of Health; draws from review of cancer treatment services carried out by three specialist working parties: Radiation Oncology, Medical Oncology, and Haematology; identifies key issues that need to be addressed and recommends that the six regional cancer centres "responsible for provision of non-surgical cancer care in the main centres and in designated secondary care hospitals where there is no specialist cancer unit" should be maintained [p. iii][151] **Cancer Control Trust established** Partnership between the MoH, NZ Cancer Society and other NGOs; established "as a mechanism by which the non-government sector could facilitate the development of a cancer control strategy" (funded by Cancer Society of New Zealand and the Child Cancer Foundation)[152] Aims to: reduce the burden of cancer in New Zealand; oversee development of a national cancer control strategy for NZ; develop a concept for a national cancer control agency; consult with, inform and educate consumer and professional organisations and relevant Government and non-government organisations about the need for a national cancer control strategy; monitor the implementation of a national cancer control strategy **Cancer Control Steering Group formed** Established by MoH to oversee the development of the national cancer strategy alongside 5 expert working groups "to advise the Steering Group and to recommend objectives for the strategy" [p. 8][153] Steering Group developed a draft strategy for discussion, released by MoH in 2002 for consultation and which informed the final New Zealand Cancer Control Strategy [p. 9] Development of the strategy was funded by MoH and CCT (CCT received NZ$700,000 from the Cancer Society of New Zealand and the Child Cancer Foundation over the period 2001-2004 [p. 81][75]	
2002	**PET-recommendations for the extension of PET and FDG*** Developed by a working group set up by the National Board of Health; Working group recommended that dedicated PET be used and during the build-up phase be geographically concentrated around oncology centres and in university environments Aim was to ensure optimal utilisation in oncology and optimisation of use scanners in other highly specialised areas and close interdisciplinary cooperation for quality development, research and teaching Working group also considered that, in the longer term, PET scanning could be done outside these specialised environments pending staffing and collaborative conditions[154]			

	Denmark	Ireland	New Zealand	Norway
2003		**An Evaluation of “Cancer Services in Ireland: A National Strategy 1996”** Prepared by Deloitte on behalf of the National Cancer Forum[141] Assessed how the Strategy was implemented, the impact of investments and key achievements and issues arising around access; the range, quality and coordination of services; success factors for and barriers to implementation Describes achievements in all 7 headings of the Strategy, including increases in chemotherapy, radiotherapy, oncology-related surgery activity while highlighting several gaps around access to radiotherapy, workforce shortages, lack of national guidelines, regional centre development, coordination at local, regional and national levels, among others Sets out 15 recommendations (e.g. expansion of radiotherapy; involvement of primary care; regionalisation/centralisation of services; quality assurance; information and evidence-based practice) and 6 priorities for future development of cancer services: (i) organisational reform; (ii) strengthening primary care; (iii) funding; (iv) information; (v) reform of acute hospital services; (v) workforce development **The Development of Radiation Oncology Services in Ireland** Published by the Expert Working Group on Radiation Oncology Services; projects future clinical need for radiotherapy and the required resources to meet these needs; makes recommendations for (i) the configuration of radiation oncology services, (ii) human resources required and (ii) a national co-ordinating mechanism[150]	**The New Zealand Cancer Control Strategy** Published by the MoH; described as “the first phase in the development and implementation of a comprehensive and co-ordinated programme to control cancer in New Zealand” [p. 1][153] Set out the overall purpose (to reduce incidence and impact of cancer; to reduce inequalities with respect to cancer), underlying principles (e.g. working within the framework of the Treaty of Waitangi to address issues for Maori; reducing health inequalities; sustainability; quality; active community involvement), and 6 identified goals: (i) reduce cancer incidence through primary prevention; (ii) ensure effective screening and early detection; (iii) ensure effective diagnosis and treatment; (iv) improve quality of life for those with cancer, their family and whanau; (v) improve the delivery of services across the continuum of cancer control through effective planning, co-ordination and integration of resources and activity, monitoring and evaluation; (vi) improve effectiveness of cancer control through research and surveillance Does not provide details on the financing of the strategy	
2004	**Evaluation of the implementation of the cancer plan. Status and future monitoring** Conducted by the Center for Evaluation and Medical Technology Assessment, CEMTV, at the request of the National Board of Health's Cancer Steering Group[155] Reviewed achievements under the 10 areas of action and identified 5 areas of focus for the further strengthening: (i) organisation of surgery; (ii) monitoring; (iii) primary-secondary care coordination; (iv) education and training; (v) capacity expansion and utilisation Focused on the period 2000-2003 and on three cancers; colon and rectal cancer, lung cancer and breast cancer			**Implementation of the National Cancer Plan 1999-2003*** prepared by SINTEF and FaFo; evaluation of achievements of the national cancer action plan[156] report not available
	Establishment of Danish Multidisciplinary Cancer Groups (DMCG) Set up in response to 2004 Committee on Cancer Plan and Research (KOF) report 'Clinical Cancer Research in Denmark', with DMCG.dk established as the association of Danish Multidisciplinary Cancer Groups In 2005 tasked by the National Board of Health to promote cancer treatment through the development of clinical guidelines and CPPs DMSCG is funded by the regions[157]			**National strategy for work within cancer care. Quality, competence and capacity** Prepared by national working group established by the Minister of Health in 2003 Presents an updated cancer strategy based on achievements of the 1998 cancer action plan; including over 200 proposals for action aimed at decision makers and managers at several levels, practitioners in prevention activities and at all levels of health and social services Key instruments: national guidelines for diagnosis, treatment and follow-up (national action programmes); national plans for the introduction of new diagnostics and new treatment; national quality monitoring as basis for strengthening competences, developing improved treatment methods and organization of the service; increase in capacity in line with increasing demand;

	Denmark	Ireland	New Zealand	Norway
				ensure adherence to statutory wait guarantee; long-term planning for staff training; funding based on medical criteria for prioritization; strengthening role of community services in local communities in cancer service provision[158] Role of the document unclear; seems to be advisory only; 2006 cancer strategy notes that consultation criticised that the report had not prioritised among the more than 200 proposed action points [p. 7][156]
2005	**National Cancer Plan II. National Board of Health recommendations for improving cancer healthcare services** Prepared at the request of the Ministry of the Interior and Health by the National Board of Health; advised by the Cancer Steering Committee[159] Plan seeks to 'strengthen cancer prevention' and to improve access to evidence-based diagnosis and treatment pathways; it provides several recommendations in a number of areas: (i) prevention and early detection; (ii) organisation of standardised diagnosis and treatment pathways; (iii) timely access to quality diagnosis; (iv) evidence-based cancer surgery, chemotherapy and radiotherapy; (v) supportive treatment; (vi) patient involvement in treatment and care decisions; (vii) staff training and education; (viii) research; (ix) monitoring and surveillance	**National Network for Radiation Oncology Services announced** Announced by the Minister for Health and Children in line with recommendations of the 2003 Expert Group report; described as "major expansion in radiation oncology services that will bring Ireland into line with its future capacity requirements and with international best practice" [p. 46][149] Network expected to be put in place by 2011, with a capital investment of >€400m to lead to 23 additional linear accelerators (total of 36); however network as such was not formally established, instead there was a phased implementation of the plans via the National Programme for Radiation Oncology (NPRO) [160] NPRO is part of the NCCP with implementation ongoing as per 2017-2026 National Cancer Strategy [p. 82][161]	**The New Zealand Cancer Control Strategy: Action Plan 2005–2010** Prepared by the Cancer Control Taskforce and published by MoH[162] Set out series of actions and milestones on how to achieve the objectives of the 2003 Cancer Control Strategy Initial 5-year timeframe for implementation, distinguishing phase 1 actions that should be implemented within the first 2 years and phase 2 action, which are expected to occur within years 3-5 Identifies a total of 112 outcomes/results, each with a set of actions to achieve these, the key stakeholders involved and milestones or measures use to assess progress (total of 152 milestones in phase 1[163]	
	Three experimental cancer treatment units established in northern, southern and eastern Denmark From 1 January 2003, state funds were allocated to fund experimental treatment abroad and in private hospitals; some of the state funding remained unused and was reallocated to establish three units for experimental cancer treatment Units are located in oncology district departments, with national coordination committee to oversee services Establishment of units for experimental cancer treatment seen to create opportunity for Danish cancer patients to early access to drugs[164] Six experimental cancer treatment units have been established since 2003[165]		**Cancer Control Council of New Zealand established** Introduced under Section 11 of the New Zealand Health and Disability Act, accountable to the Minister 0f Health, to provide "an independent, sustainable focus for cancer control"; tasked with monitoring and reviewing the implementation of the 2003 Cancer Control Strategy; providing independent strategic advice to the Minister of Health and other stakeholders; fostering collaboration and cooperation between bodies involved in cancer control; fostering and supporting best practice/an evidence-based approach cancer control; establishing and maintaining linkages with overseas cancer control agencies [p. 11][166] **Principal Advisor Cancer Control established within Ministry of Health** Announced in the 2005 Cancer Action Plan, with the role "to drive implementation of the Strategy, foster collaboration and co-operation, attend meetings of the Council to report on progress with implementation, and assist with co-ordinating the efforts of the Council, the Ministry and the wider sector" [p. 7][162] Accountable to the Director-General of Health; leads the Cancer Control Work Programme established by MoH to implement the 2005 Action Pan [p. 81][75]	
2006	**Joint cancer unit between Ministry of Health and National Board of Health established** Set up to strengthen the oversight and control of the cancer field to ensure steady and rapid progress in the radiation field (does no longer seem to exist – no mention in recent documents)[167]	**A Strategy for Cancer Control in Ireland** Published by the National Cancer Forum/Department of Health; aims "to build on the major successes in cancer that have been delivered under the 1996 National Cancer Strategy" [p. 3][149] Recommends "a major Framework for Quality in Cancer Control with an extensive role for the Health Information and Quality Authority" [p. 3][149]	**Regional Cancer Networks beginning to be established** Identified as a priority in the 2005 Action Plan; 4 networks (Northern, Midland, Central, Southern) "work across organisational boundaries to promote a collaborative approach to service planning and delivery"[169] Set up within existing district health board (DHB) structure 2010 evaluation of networks found that there remained	**Cancer strategy 2006-2009** Published by MoH; follow-up of 1999-2003 cancer action plan and based on recommendations of the 2004 cancer strategy, including the 2004 consultation[156] Central aim is for cancer to be made a key priority for the health service and other sectors, highlights the role of patient rights (timely access to health services) and appropriate funding of the service [p. 5] Defines national objectives in 10 areas, each with

	Denmark	Ireland	New Zealand	Norway
		Focuses on 5 areas: (i) health promotion and cancer prevention (20 actions around health promotion, health inequalities, screening, early detection); (ii) managed cancer control networks (19 actions); (iii) a national framework for quality in cancer control (19 actions around the framework, licensing & accreditation, information, HTA); (iv) thinking ahead (4 actions around human resources and research); (v) policy indicators (1 action for HSE to report on 19 indicators to National Cancer Forum each year) Plan recommended the development of a National Cancer Workforce Plan but this was not implemented[168]	insufficient understanding of the purpose of networks along with commitment to and ownership by network stakeholders as well as funding and access to data [p. 15][170] Initial focus on inequalities by virtue of dedicated funding from 2008 of an additional $250k annually for each network to "increase their capacity to focus on addressing systemic causes of inequalities for population groups with respect to cancer" [p. 38][166]	planned or already initiated measures and actions for consideration: (i) prevention; (ii) national screening programmes; (iii) cancer patient experience and living context; (iv) diagnostics; (v) treatment; (vi) alternative treatment; (vii) rehabilitation; (viii) palliative care; (ix) workforce capacity and competence; (x) cancer registration There are no specific milestones for the objectives; Directorate for Health and Social Affairs assigned responsibility for coordination and follow-up of the strategy, with a 'dedicated post' to be established within the Directorate to lead on implementation; strategy was eventually extended to 2011[171]
	Radiation Treatment Taskforce established Set up by National Board of Health and Ministry of Health with 'representation of the five regions, the Danish Regions, the National Board of Health and the Ministry of the Interior and Health' to allow for better coordination of radiotherapy across regions; discontinued from 2009 with last report published then and not listed on Danish Health Authority's task forces website[167]			
	PET (Positron emission tomography). Recommendations for the expansion of PET and FDG (flourodeoxyglucose) production Commissioned by the National Board of Health in response to Cancer Plan II recommendation to update the 2002 PET report Developed by working group representing oncology centres, Danish Society for Clinical Physiology and Nuclear Medicine, Danish Radiological Society, Danish Society of Clinical Oncology, and County Council Association and counties Described (i) the professional need for PET; (ii) the future capacity needs and propose a future expansion (incl. location); (iii) the need for possible expansion of the tracer production, involving both FDG and any other tracers; (iv) volume and number of production units[154]			
2007	**Update of Cancer Plan II** Published by NBH following Cancer Steering Group decision in March 2006 to follow up on Cancer Plan II to provide overview of the implementation of the recommendations of the Plan in the regions and centrally[167] Based on feedback from the regions, the Danish Medical Society, the Danish Multidisciplinary Cancer Groups, the Danish Nursing Society, the Professional Society for Cancer Nurses and the central health authorities Follow-up period covers the period from Cancer Plan II in June 2005 to mid-2007 (limited evaluation, not 'exhaustive or comprehensive in all areas')	**National Cancer Control Programme (NCCP) established** Created within the Health Service Executive following the 2006 Cancer Strategy to "ensure that all elements of this cancer policy and are delivered to the maximum possible extent"[172] 2009 and 2010 HSE National Service Plans detail financial commitments to support implementation of 2006 cancer strategy recommendations as part of the NCCP[173] [174]	**Mapping Progress: The first two years of the Cancer Control Strategy Action Plan 2005–2010** Published by the Cancer Control Council; focus on Phase 1 milestones of the Cancer Control Strategy Action Plan 2005–2010 Of the 152 phase 1 milestones, 23 had been achieved (15%), 85 were in progress (56%), 33 were delayed (22%) and 11 could not be assessed[163] Followed by the 2008 'Mapping Progress II: Phase 1 of the Cancer Control Strategy Action Plan 2005–2010' providing an update on progress on phase 1 cancer control activities and a "strategic-level evaluation of how the multiple activities in the cancer control field contribute to achievement of the overall outcomes of the Cancer Control Strategy Action Plan" [p. 5][166]; focuses on phase 1 and overlapping parts of phase 2, but not phase 2 as such; report mentions a 2009 monitoring report but unclear whether this was ever produced	
	Reorganisation of cancer services into fewer hospitals begins as part of the 2007 administrative and hospital reforms The 2007 administrative reform created five regions and 98 municipalities (merging 13 counties and 271	**Establishment of Managed Cancer Control Networks and Designation of Eight Cancer Centres** Published by the Health Service Executive as report on the implementation of the 2006 Cancer Strategy; designated cancer centres serve a population of approx.	**Cancer Control Workforce Stocktake and Needs Assessment** Published by MoH; follows one of the key actions set out in the 2005 Action Plan which proposed a 'comprehensive stocktake of the cancer workforce' to	

	Denmark	Ireland	New Zealand	Norway
	municipalities, respectively); this fundamentally changed the administrative landscape of Denmark, with major implications for the hospital infrastructure; number of (somatic) hospitals fell from 40 public hospitals in 82 locations in 2007 to 21 hospitals in 68 locations in 2016, achieved through a combination of hospital closure and transformation into health centres, and significant investments committed to rebuilding existing infrastructure (including the construction of new hospitals) Main aim was centralise specialised care into fewer (larger) hospitals; regions are responsible for planning standard hospital services, planning for the overall distribution of specialised services (incl. clinical oncology) is the responsibility of the Danish Health Authority[175]	0.5 million each; organised in 4 cancer networks, each with 2 cancer centres[160]	inform the development of a national cancer workforce strategy Identifies workforce issues in the areas of primary prevention, primary care, screening, diagnosis, treatment, palliative care, rehabilitation and Maori and Pacific peoples, with recommendations for each; e.g. highlights challenges for recruitment and retention of medical oncology and radiation therapy Expects for the report to be reviewed and updated after 2 years but no such published document was found; however, a medical oncology national implementation plan was published in 2012 as was a national radiation oncology service plan in 2014[176]	
	National agreement on implementation of integrated 'cancer care packages'; Cancer Treatment Taskforce established to oversee process 'Political agreement' signed between government and Danish Regions; cancer care packages ('cancer patient pathways', CPPs) to be developed based on relevant clinical guidelines Cancer Treatment Task Force established to oversee the implementation of CCPs (subsequently 'Task Force for Cancer and Heart Patients'); taskforce brought together clinical working groups with representatives from the Danish Health and Medicines Authority, health professionals at the regional level, relevant medical associations, GPs and specialists, By the end of 2008, integrated clinical pathways for 32 types of cancer had been developed[177]			
2008	**Care packages for 32 cancers ('Cancer Patient Pathways', CPPs) rolled out across all Danish regions** CPPs were sequentially implemented throughout 2008 and 2009: by April 2008 CPPs for breast, colorectal, lung and head and neck cancers; by June 2008 CPPs for gynaecological cancers; by September 2008 CPPs for leukemic cancers; by November 2008 CPPs for urinary tract, malignant melanoma, brain and CNS cancers; by January 2009 CPPs for prostate, upper gastrointestinal, and remaining cancers[178]	**Programme of centralisation of services for specific cancer sites begins** Process began with centralisation of breast cancer surgery from 32 hospitals to 8 cancer centres (plus 1 satellite centre), fully implemented by end of 2009; following this NCCP progressively "moved to centralising prostate, lung, pancreas, rectal and oesophageal cancer services in specified cancer centres" [p. 2][160]; e.g. by 2010, surgery for pancreatic cancer had been centralised in a national centre (two sites); by 2011, lung cancer surgery had been centralised to 4 centres; by 2012, a national programme for oesophageal cancer at 1 centre and 3 satellites had been established[172]	**Development of national Cancer Control Programme** Led by MoH, includes ministry, DHBs and regional cancer networks to implement the government's priorities for cancer; CCP governed by the Cancer Control Steering Group (CCSG) advised by a range of advisory groups [p. 19-20][170]	
2009		**Rapid Access Clinics for prostate cancer and lung cancer established in all eight designated cancer centres** This concerned rapid access clinics for people strongly suspected of having prostate or lung cancer[172]		
2010	**Strengthened efforts in the field of cancer - a health professional presentation (Cancer Plan III)** The National Board of Health's 'proposal for the new cancer plan' in response to the announcement by the Minister of Health and Prevention in 2009 that a new cancer plan be prepared[179] Previous plans' focus had been on improving clinical cancer treatment while Plan III focuses on prevention and early detection, rehabilitation, palliation and patient involvement; provides recommendations under a range of		**Cancer Control New Zealand formed** Evolved from CCC as a "Ministerial Advisory Committee providing an independent and sustainable focus on cancer control through strategic advice to the Minister of Health" [p. 20][170]	

	Denmark	Ireland	New Zealand	Norway
	themes: investigation and treatment ('cancer care packages'); consolidation of cancer screening and treatment in fewer hospital units; prevention and health promotion, with a focus on vulnerable groups; (iv) prevention at municipal level (professional standards, coordination with primary care); early detection and diagnosis, including in primary care; focus on comorbidity			
	Government Agreement makes it mandatory for regions to have hospital-level coordinator function for cancer and cardiac patients Government agreement following the recommendations of Cancer Plan III, setting out financial commitments to support defined actions[180]			
2011	**National implementation of CPPs for unspecific, serious symptoms by the National Board of Health and Danish Regions** Government agreement following the recommendations of Cancer Plan III, setting out financial commitments to support defined actions[180]			**20-day treatment guarantee introduced** Prime Minister announces introduction of a 'waiting time guarantee' by which 80% of all cancer patients should start their treatment for cancer within 20 days of diagnosis.[181] This objective was further formalised in the 2013-2017 National Cancer Strategy[171] and in 2015 replaced by standardised cancer patient pathways.[182]
	Joint Implementation Plan for Cancer Plan III Published by Ministry of the Interior and Health, Danish National Board of Health, Danish Regions and KL[183] Sets out the tasks and processes that need carried out to implement the Plan and sets timelines for tasks to be completed by 2011/2012/2013			
2012		**National Oncology Drug Management Programme introduced** Introduced by NCCP "to oversee and manage the funding of specified hospital-administered systemic anti-cancer drug treatments to public hospitals", replacing the previous system by which each of the 26 hospitals had to pay for new cancer drugs Established NCCP Technology Review Committee for new drugs and related predictive laboratory tests Fund for growth in cancer drugs initiated in 2013 [p. 3-4][160]	**Faster Cancer Treatment indicators introduced** Part of the 'Faster Cancer Treatment programme' [2015 Cancer Plan, p.6] Defines 2 indicators: 31 day indicator (patients with a confirmed cancer diagnosis receive their first cancer treatment within 31 days of a decision to treat); 62 day indicator (patients referred urgently with a high suspicion of cancer receive their first treatment within 62 days of referral (introduced in 2014) Cancer wait targets were introduced in 2007 as part of the overall Health Targets 2007/08 programme, stipulating a maximum of 8 weeks wait between first specialist assessment and the start of radiation oncology treatment[184]] Followed by the 2011 initiative Targeting Shorter Waits For Cancer Treatment which (initially) focused on radiation treatment and specified that all patients who are ready for treatment should wait less than four weeks for radiotherapy or chemotherapy; by 2014, the Shorter waits target had consistently been achieved for all patients in all DHBs and was replaced by the 62-day indicator from 2014 (shorter wait target continues to be monitored)[169]	
			Medical Oncology National Implementation Plan 2012/13 Published by MoH; described as signifying "the start of a process for increasing capacity and improving the delivery of medical oncology services in New Zealand" [p. v][185] Follows (unpublished) review of new models of care for medical oncology which recommended the development of a framework defining cancer service provision and staff roles and responsibilities within it New model expected to be implemented over 3-5 years; sets out activities to be undertaken in 2012/13 fiscal year	

	Denmark	Ireland	New Zealand	Norway
			with an expectation of annual updates (followed by 1 update 2013/14 only)	
2013		**Strategy and Educational Framework for Nurses Caring for People with Cancer in Ireland** Developed by the National Cancer Control Programme in partnership with the HSE Office of Nursing and Midwifery Director Aims to "guide and support nurses in the provision of quality cancer care to people with cancer in Ireland" [p. 3][186]		**Together – against cancer. National Cancer Strategy 2013–2017** Based on a 'foundation document' prepared by the Directorate of Health in consultation with the Norwegian Cancer Society which sets out the 'Status, trends and challenges relating to cancer' [not available] Strategy set out five national objectives, each with a set of sub-objectives: (i) strengthen user-oriented care (promote active patient role; 8 sub-objectives); (ii) Norway as leading example for good patient care (timely, coordinated, standardised and effective treatment; 14 sub-objectives); (iii) prevention and screening (8 and 7 sub-objectives); (iv) improve survival and longevity (advanced treatment, 13 sub-objectives; late effects, 3 sub-objectives; children and young people, 4 sub-objectives; older people, 3 sub-objectives; workforce, 6 sub-objectives; cancer registry, 4 sub-objectives; quality indicators, 2 sub-objectives; research and innovation, 6 sub-objectives); (v) rehabilitation and palliative care (8 sub-objectives) 'Partnership against cancer' between Norwegian Cancer Society, Norwegian Association of Local and Regional Authorities (KS), the four regional health trusts, cancer patient organisations, the Norwegian Cancer Registry and the Norwegian Directorate of Health formed to oversee the implementation of the strategy's objectives [p. 5][171]
2014		**Oncology Medication Safety Review Report** Published by NCCP; reviewed oncology medication policies and practices in the 26 hospitals that administer systemic cancer therapy in adults and children Recommends "that hospitals collaborate within the new hospital groups structure, to share good practice pertaining to systemic cancer therapy provision and to develop and implement national policies and practices for oncology medication" [p. 7][187] Accompanied by an action plan[188] seeking to provide a 'roadmap' for the implementation of review recommendations; identifies lead responsibility for each recommendation, the timeline for implementation and the status Implementation is ongoing and separate reports have been published for some recommendations, with a final implementation status report published in 2017[189]	**Radiation Oncology National Linear Accelerator and Workforce Plan** Prepared by Health Partners Consulting Group for MoH, overseen by a Project Steering Group and guided by Expert Advisory Group; builds on earlier capacity planning of radiation therapy services by regional cancer networks Described as "New Zealand's first dedicated national radiation oncology plan" with the aim to "inform a nationally coordinated approach to radiation oncology service and capacity development, within the context of the National Cancer Programme" over the following 5-10 years and a focus "on projected demand growth for radiation therapy, its implications for linear accelerator and workforce capacity, and associated cost impacts" [p. 1][190]	
		National Cancer Strategy 2006: a Strategy for Cancer Control in Ireland. Evaluation Panel report Prepared by an external Evaluation panel commissioned by the Minister for Health; scope of the evaluation incl. the outcomes of the Strategy's recommendations and the impact of the strategy on cancer control in terms of Strategy's policy indicators; the projected need for cancer services over the next 10 years; make recommendations and indicate areas for development in the next strategy, among others[168]	**New Zealand Cancer Plan: Better, faster cancer care 2015–2018** Published by CCNZ Main focus on advancing the Faster Cancer Treatment (FCT) programme, including, in addition to the 62 day indicator: (i) ongoing development of national standards for 10 tumour types; (ii) service improvement fund to support DHBs deliver faster cancer treatment ($11.2m ver 4 years); (iii) improving coverage of multidisciplinary meetings; (iv) implementing cancer nurse coordinator initiative [p. 6][191]	

	Denmark	Ireland	New Zealand	Norway
			Achievement of FCT through taking a pathway approach along prevention and early detection; diagnosis and treatment; follow-up care supported by infrastructure, workforce and supportive care (‘enablers’); to be implemented through National Cancer Programme annual work plans and measuring progress above all against the 62 day FCT target Identifies actions for each of the 6 areas, how they will be implemented, who takes the lead and expectations of what is to be achieved by 2018	
2015		**Report on the implementation of ‘A Strategy for Cancer Control in Ireland 2006’** Published by the National Cancer Control Programme Sets out what had been achieved since the 2006 Cancer Strategy; assesses progress on each of the 55 Cancer Strategy recommendations and provides an overview of the funding that was allocated to cancer service development via NCCP and NCSS between 2007 and 2014 Notes that dedicated cancer service development funding and staffing had been allocated “towards agreed service priorities” and as it had remained under NCCP and was allocated on a ‘once off basis each year’ the cancer budget had been subjected to financial cuts imposed on hospital services [p. 211-212][160]	**Cancer Control New Zealand disestablished** “disestablished in August 2015 as its role was superseded by the progress made in improving cancer services for New Zealanders”[169]	**Standardised cancer patient pathways introduced** Following the 2013-2017 national cancer strategy, the Norwegian Directorate of Health was commissioned, in 2014, to prepare national ‘care packages’ for cancer (pakkeforløp for kreft) and diagnostic guides for GPs, with a total of 21 working groups having prepared 29 care packages and diagnosis guides for cancer ‘according to the Danish model’ [p. 2][182] Phased roll-out as further stipulated in 2015 National Action Plan [p. 12][192]; to be implemented by health trusts and GPs from Jan 2015 (n=4), then 10 by May 2015 and final 14 by Sept 2015 (n=28: 26 disease-specific, 1 diagnostic for non-spec symptoms and 1 for metastases with unknown starting point) Implementation overseen by the Norwegian Directorate of Health / RHFs, HFs and GPs [p. 13][192]
		Cancer Strategy Steering Group established Established by the Minister for Health to advise the Department of Health on the development of a new national cancer strategy, initially planned to cover the period 2016-2025[193] Foreseen to be dismantled following completion of its work[194]		**National Action Plan for Cancer 2015-2017** Prepared by the Health Directorate; specifies actions to be out in place to achieve the objectives of the 2013-2017 cancer strategy[192] Describes, for each of the 5 objectives and related sub-objectives, ’necessary measures’, including responsible actor/s and timeline; notes that measures should ‘build on existing structures and co-operation agreements’ between the different actors/tiers of the system [p. 4][192]; e.g. under Objective 4/treatment, ‘4.2 Capacity’ includes: a review of cancer surgery and formulation of quality and robustness requirements for units performing cancer surgery, to be overseen by the Norwegian Directorate of Health by March 2015 Preparation of a plan for modernisation and upgrading of equipment for cancer diagnostics and treatment for 2017-2025 (imaging, pathology and molecular diagnostics, endoscopy, and radiation therapy), by July 2016 [p. 30f][192]
2016	**Patients’ Cancer Plan. Cancer Plan IV** Publication of Plan follows submission, in June 2016, by NBH of its 'professional presentation to Cancer Plan IV' to the Minister of Health and Elderly[195] Initiatives in Cancer Plan IV build on the previous cancer plans Identifies three national objectives: (i) cancer survival in Denmark in 2025 to be on par with the best of our Nordic neighbouring countries; (ii) A smoke-free generation of children and young people by 2030; (iii) by 2020, 90 per cent of all cancer patients have a patient-responsible physician who ensures consistency and safety along the patient's pathway Describes 16 initiatives, among these: patient-responsible doctor; investment in shared decision-making tools;			

	Denmark	**Ireland**	**New Zealand**	**Norway**
	treatment at home; competency and quality in cancer surgery; strengthening capacity both in terms of staffing and equipment (specialist doctors, replace old equipment, increase use of existing equipment, IT) Commitment to monitor achievement of the three national objectives annually in 2017, 2018, 2019 and 2020.			
2017	**Implementation agreement on Cancer Plan IV (2017-2020)** Initiatives are financed through the 2017 Finance Act and the Rate Pool Agreement for 2017-2020[196]	**National Cancer Strategy 2017-2026** Prepared by Cancer Strategy Steering Group; builds on 2006 strategy, 2014 External Evaluation and 2015 NCCP Implementation reports[161] Identifies 4 goals, each with defined objectives and measures for assessment: (i) reduce cancer burden through prevention, improving symptom awareness, increase early diagnosis and focus on inequalities; (ii) provide optimal care through effective and equitable treatment along the care continuum, further develop facilities and infrastructure; (iii) maximise patient involvement and quality of life; (iv) enable and assure change through strengthening the role of the NCCP, ensuring ongoing workforce planning, utilising technology, research and data, enhancing systems and processes Develops 52 recommendations, each with an identified lead for implementation; requires annual report on progress with 23 key performance indicators for each objective or action with target and timeline	**The National Radiation Oncology Plan 2017 to 2021** Published by MoH as follow up on the 2014 Radiation Oncology Plan "by taking a broader perspective of the radiation oncology sector, and looking beyond linac and workforce capacity to include patient services" [p. 3][197]	
	White paper on patient-responsible physician Agreement by the Danish Regions, in collaboration with a range of key stakeholders, on a national model for introducing the patient-responsible physician into the Danish hospitals. The agreement originates from the Government's Cancer Plan IV and the Regions Finance Agreement for 2017 Initially to be rolled out for cancer patients (by 2017)[198])			
	National Comprehensive Cancer Center (DCCC) for cancer research and treatment established Set up by the Danish government, public Danish hospital owners, clinical cancer departments, universities and Danish Cancer Society as part of Cancer Plan IV Aims are principally accelerate translational cancer research through strengthening national collaborations from basic research to clinical practice; to improve and standardise the quality of cancer treatment; attract external funding and expertise[199]			
2018 and after			**New Zealand Cancer Action Plan 2019–2029**	**Living with cancer. National Cancer Strategy (2018–2022)[200]**

Note. Green colour – 'event'; orange colour – published cancer plan or strategy; blue colour – evaluation, progress report or cancer system review

Supplement Table S.5. Evolution of cancer strategies: United Kingdom

	England	Northern Ireland	Scotland	Wales
1995	**Policy Framework for Commissioning Cancer Services (The Calman-Hine Report)*** Prepared by the Expert Advisory Group on cancer, established by the Chief Medical Officers for England and Wales; outlined the direction in which cancer services in England and Wales should be developed Set out 7 principles that should govern the provision of cancer care, including access to uniform high-quality care; early identification; patient-centredness; cancer registration and monitoring [p. 338][201]; report did not cover prevention Developed a series of recommendations, including creation of a tiered system comprising of designated cancer centres with specialised diagnostic and therapeutic facilities, supporting cancer units in general hospitals and primary care with referral guidelines ('cancer networks'), along with multidisciplinary management, the delivery of cancer-site specific and creation of a cancer-site specific nursing services, among other recommendations Report did not provide a plan for implementation and "no additional resources were provided at the time for these tasks" [para 1.13][202]			**Policy Framework for Commissioning Cancer Services (Calman-Hine Report)*** see England
				Cancer Services Expert Group (CSEG) established Formed by the Secretary of State for Wales; tasked to identify how cancer services in Wales should be configured, including advising the Welsh Office about how the recommendations of the Calman-Hine report can achieve access to services for the whole population, takes account of patient preferences and local views, improves clinical and cost effectiveness of services; the timescale for implementation and implications for the workforce; provide a report within 12 months; inform purchasing intentions for cancer services in 1997/98 [p. 4][203]
1996	**Clinical Outcomes Group (later: National Cancer Guidance Steering Group) established** Tasked "with developing guidance for the implementation" for the Calman-Hine recommendations in "NHS services for common cancers" [p. 3][204] Published 'Improving Outcomes' guidance for breast in 1996 ('COG Guidance'), followed by IOG for colorectal cancer in 1997, for lung cancer in 1998 and gynaecological cancer in 1999; subsequent IOG for other cancers was issued by NICE	**Cancer Services - Investing for the Future (Campbell Report)*** Produced in response to the 1995 Calman-Hine report, Cancer Working Group established by the NI Department of Health and Social Services Recommended that cancer patients should be managed by multidisciplinary, multiprofessional specialist cancer teams; a Regional Cancer Centre should be established at Belfast City Hospital and Royal Victoria Hospitals (which would integrate radiotherapy and chemotherapy) along with 4 other Cancer Units (one in each Health Board)[205]	**Commissioning Cancer Services in Scotland Report** Prepared by the Scottish Cancer Co-ordinating and Advisory Committee (SCCAC)[206] Builds on 1995 Calman-Hine report, endorsing a new structure for cancer services to be based on a network of expertise in cancer care with consideration of Scotland's geography Notes that while regional cancer centres were already determined (5 locations), the configuration of Cancer Units was to be developed further Presents a planning framework for 1996-97 setting out a work programme with identified leads (health boards, trusts, SCCAC) and milestones for the configuration of cancer services across Scotland	**Cancer Services in Wales (Cameron report)** Prepared by the Cancer Services Expert Group[203] Includes total of 18 Task Groups reporting on specific cancer sites or wider issues such as financing, information, primary care, etc (published separately), informing range of recommendations Recommendations understood as "key principles" that should govern the cancer services in Wales; summarised as the integration of an All Wales service for cancer patients at cancer centre level (with 3 centre locations identified); common guidelines, protocols and audit between the 3 centres; cancer care to be provided by multidisciplinary teams; tumour-site specific teams to be retained at All Wales level; information systems to collect common data to be used across all trusts; provision of information to patients and GPs on availability of specialist cancer services [p. 3] Does not provide details on how implementation will be financed
	Cancer networks beginning to be formed Creation in response to recommendations from the Calman-Hine report; network formation reinforced in the 2000 NHS Cancer Plan as "the organisational model for cancer services" in England, bringing together			

	England	Northern Ireland	Scotland	Wales
	commissioners and providers, the voluntary sector, and local authorities, serving a population of approximately 1-2 million people.” [p. 93][207] Full implemented following 2000 NHS Cancer Plan with 34 networks covering all of England, responsible for the development and planning of cancer services and “coordinated by a network management team and headed by a network board” [p. 3][208]			
1997				**Cancer Services Co-ordinating Group (CSCG) established** Set up to implement key recommendations of the Cameron Report[209] Represents range of stakeholders from across the NHS in Wales along with patients Among core implementation aims was “move towards an equitable service with patients having access to specialist cancer care regardless of where they live”, with the introduction ‘All Wales Minimum Standards’ for cancer care developed by a CSCG working group Standards issued for 9 common cancers and specialist palliative care
1998			**Scottish Cancer Group established** Tasked to “lead and direct Scotland's cancer strategy; and to lead and advise Ministers/Scottish Executive/Chief Medical Officer on cancer issues”; reports to the Chief Medical Officer[210]	
1999	**Two-week wait standard for breast cancer introduced** Defined as maximum wait for an urgent outpatient appointment in case of suspected cancer; roll-out to other cancers in 2000 [p. 48][207] Followed by the publication of ‘Referral guidelines for suspected cancer’ by the Department of Health in 2000, subsequently reviewed by the newly established National Institute for Clinical Excellence (NICE), following a commitment set out in the 2000 Cancer Plan and published as NICE guideline CG27 in 2005; CG27 was replaced in 2015 by NICE guideline [NG12] lowering the risk threshold for suspected cancer pathway referrals[211]	**Northern Ireland Cancer Forum set up** Established as a “meeting point for all voluntary and statutory bodies dealing with cancer” in NI with the aim to “empower patient organisations, facilitate a team approach to cancer care, enable resources to be shared and promote better communication between organisations” [p. 1383][212]		
	Cancer summit hosted by the Prime Minister and National Cancer Director appointed Published 5-point action plan committing to a review of cancer services and the appointment of a “new Cancer Action Team to work with the NHS to raise the standard of cancer care in all hospitals”, along with extending the Improving Outcomes Guidance series [para 5.27][213] Summit also led to the establishment of the role of a National Cancer Director to lead the development of national cancer policy and overseeing its implementation across the NHS; further followed by the announcement of a target to reduce the death rate from cancer among those under 75 by at least a fifth by 2010 (compared to a 1997 baseline) [Section 5][213]	**Ireland-Northern Ireland-National Cancer Institute Cancer Consortium (All-Ireland Cancer Consortium, AICC) launched** A trilateral partnership between the Irish DH, the Northern Ireland DHSS and the National Cancer Institute in the US; established at a cancer conference in Belfast in 1999; works on joint programmes in education/scholarship exchange, cancer registration, information technology, and clinical trials in an effort to advance cancer care and research[145] According to Lewison et al. (2020)[146], the consortium “delivered significant additionality on the island of Ireland, promoting transnational cooperation, enhancing cancer research activity, and underpinning improved cancer services and better cancer outcomes” [p. 15]		
	Cancer Services Collaborative programme established Following from the 1999 cancer summit National initiative aiming to “help cancer networks reshape the services” and improve services for cancer patients through ‘optimising systems of care delivery’ [p. 50][207]; first phase included 9 cancer networks, second phase to commence in April 2001 and include all cancer			

	England	Northern Ireland	Scotland	Wales
	networks in the NHS; part of NHS Modernisation Agency established in 2001[214]			
2000	**The NHS Cancer Plan** Developed in parallel with the wider 2000 NHS Plan; described as the "first comprehensive national cancer programme for England" aiming to improve survival, ensure access to cancer services, address health inequalities and invest in the cancer workforce [p. 5][207] Sets out "a programme of investment and reform" [p. 3][207] with focus on 9 priority areas, with specific commitments in each area, actions and milestones for the period 2000-2005: (i) prevention; (ii) screening; (iii) cancer services in the community; (iv) timely diagnosis and treatment; (v) treatment; (vi) care; (vii) staff; (viii) facilities; (ix) research Also sets out plan for implementation with roles assigned to the National Cancer Director and the National Cancer Taskforce (to oversee implementation); regional offices; cancer networks and their members; health authorities, PCTs and NHS trusts		**Our National Health: A plan for action, a plan for change** National strategy which identifies cancer as one of the 3 clinical priority areas (along with coronary heart disease and mental health)[215] Commits to the publication of a 'comprehensive Scottish Cancer Plan' with new national targets for maximum waiting times by 2001; also introduces maximum waiting times for cancer treatment: Breast cancer: commence treatment within one month of diagnosis by Oct 2001; Children's cancer and acute leukaemia: commence treatment within one month of diagnosis by Oct 2001; All cancers: major service redesign to improve patient journey from referral to treatment by April 2002; All cancers: Maximum wait from urgent referral to treatment to be two months by 2005 Further commits to establish fully functional cancer Managed Clinical Networks by 2002	
	National Cancer Taskforce established Chaired by the National Cancer Director tasked "to drive forward the implementation" of the NHS Cancer plan [p. 93][207]; involves patient representatives, clinicians and managers; role is to advise the National Cancer Director and ministers, to monitor progress and identify development needs[208]			
2001	**National Cancer Research Institute (NCRI) established** Formation of NCRI put forward by 2000 NHS Cancer Plan; conceived as partnership between government, voluntary sector and private sector, with 'strategic oversight of the cancer research' in England [p. 87][207] Tasked to lead on "identifying areas where further research initiatives are needed and most likely to lead to progress"[p. 87]; newly developed NHS Cancer Research Network (NCRN) as a base for the conduct of clinical trials was to be integral part of the NCRI (NCRN subsequently became part of the National Institute for Health Research (NIHR) Clinical Research Network); NCRI promotes collaboration in cancer research and so accelerate progress in cancer-related research		**Cancer in Scotland: Action for Change** Published by NHS Scotland[216] Identifies 7 strategic priorities: (i) prevention, (ii) early detection and treatment; (iii) rapid access to diagnosis and treatment; (iv) improving cancer treatment and care; (v) palliative care; (vi) investing in staff and technology; (vii) supporting research and development; and an implementation priority; with general directions for further developing cancer services for each (rather than specific actions or milestones), often referring to activities that are already ongoing and be built upon Announces the establishment of 3 Regional Cancer Advisory Boards to support regional Managed Clinical Networks (MCN) that were beginning to be established from 2000 Accompanied by a series of 'National implementation/investment' plans in financial years 2001/02 and 2002/03, setting out detailed action points, planned/expected costs, milestones/target dates and named responsible lead by Regional Cancer Advisory Group.[216] [217]	**Improving Health in Wales includes cancer services priorities** Published by the National Assembly[218] Sets out 'the policy agenda' over ten years Among overarching goals (improving performance, population health improvement, tackling health inequalities) identifies specific areas for action, specifying that cancer patients/ carers will (i) have a consultant appointment within 10 days of an urgent GP referral; (ii) receive a diagnosis and appointment for treatment in line with CSCG minimum standards for cancer care; (iii) have treatment and care discussed by multidisciplinary team; (iv) have increasing access to specialist nurses [p. 24] To be delivered through (i) the development of three managed clinical networks for cancer care (by 2001); (ii) piloting GP referral guidelines (final guidelines by 2002); (iii) implementation of the Cancer Information Strategy during 2001
			Regional Cancer Advisory Groups established Set up as part of the 2001 Cancer in Scotland strategy; proposes three groups: West of Scotland (covering Beatson Oncology Centre), North of Scotland (Inverness, Aberdeen and Tayside Cancer Centres), South East Scotland (Oncology Centre in Edinburgh) Tasked to collaborate with the regional MCNs in a new planning process for cancer services and "to draw up	

	England	Northern Ireland	Scotland	Wales
			realistic and effective workforce, equipment and chemotherapy spending investment plans in agreement with NHS Boards” [p. 59][216] Further expected to report annually on the services provided and outcomes of patient care to relevant clinical governance committees across [p. 35][216]	
2002		**Inquiry into the delivery of cancer services in Northern Ireland** Prepared by the Committee for Health, Social Services and Public Safety of the Northern Ireland Assembly[205] Agreed 41 recommendations around (i) resources (increase in funding for health services, conduct annual audit of caner services across NI and at cancer unit level); (ii) patient need (early diagnosis/screening, referral and waiting time for treatment, travel/transport); (iii) staffing and regional workforce plan; (iv) regional cancer centre and units/provision of services (concerns about lack of progress in creation of regional cancer centre as recommended in the Campbell report due to open in 2003; establishment of integrated clinical network of work; concerns about specific services); (v) primary care (strengthen the role of GPs, interface between primary and secondary care, out-of-hours care); (vi) service inequalities; (vii) strategic issues (develop regional cancer plan, information management, disease registries); (viii) prevention		
2003	**The NHS Cancer Plan. Three year progress report** Published by the Department of Health; reports on achievements since publication of the 2000 Cancer Plan[214]			
2004		**Northern Ireland Cancer Network (NICaN) established** NI’s first Regional Clinical Network which works in collaboration with a range of stakeholders to improve cancer services through supporting its members to ”deliver cancer services that are evidence based, ensure equity of access and quality of cancer services for the population of Northern Ireland, work across organisational boundaries following the patient pathway”[219]] **Regional Cancer Services Framework (Steering) group established** Followed commissioning, in 2003, by the DHHS of the Regional Cancer Framework; chaired by the NI CMO with representation from services and patients, tasked to develop recommendations for cancer services up to the year 2008, for the development of services to 2015 and to suggest an “overarching strategic direction for services to 2024” [p. 6][221]	**Cancer in Scotland: Sustaining Change** Aims to summarise progress that had been made since the 2001 Cancer in Scotland strategy and to set the direction for further development of cancer services in Scotland Maintains structure of the 2001 strategy in terms of priority areas while emphasising specific priorities, each setting out defined ‘next steps’: prevention and early detection (22 next steps); improving access, incl. palliative care (29); investing in staff and technology (10); supporting research (3); making it happen (18) [220]	
2005	**The NHS Cancer Plan: A progress report** Prepared by the National Audit Office (NAO); final of a series of 3 NAO reports assessing cancer services in England, with the first examining cancer services and survival across England and in international comparison; second reporting on cancer patient experiences; 2005 progress report assessed implementation of the 2000 NHS Cancer Plan and progress against targets and commitments [p. 1][208]			**National Cancer Standards introduced** Published by the Welsh Assembly; replace 2000 CSCG Minimum Standards[209] for cancer services Cover 10 cancer sites plus specialist palliative cancer care, setting out requirements for patient centred care, multidisciplinary team (MDT) work at different levels, “adherence to and audit against nationally agreed clinical guidelines, and waiting times from referral or diagnosis to start of definitive treatment” [p. 2][222] Cover core and developmental requirements building on

	England	Northern Ireland	Scotland	Wales
				Minimum Standards and NICE Improving Outcomes Service Guidance (IOG) and sets out action points for government, commissioners and provider on how to achieve this, with specified milestones for each; commitment that Standards will be regularly reviewed by CSCG[222] Does not provide details on how implementation will be financed
	A Framework for the Development of Positron Emission Tomography (PET) Services in England Published by the Department of Health; developed at request of commissioners and seeks to provide advice on evidence of benefits of PET scanning; number of PET scanner likely to be required along with workforce and training requirements as well as capital and revenue costs [p. 4][223] Report launched alongside a report by the Royal College of Radiologists 'PET-CT in the UK' (2005) seen to "take forward and make a reality of this framework" [p. 4]; does not offer specific recommendations regarding the funding for PET			
2006		**Belfast Regional Cancer Centre (now: Northern Ireland Cancer Centre) opened** Follows the 1996 Campbell report, which recommended the reorganisation of cancer services towards a 'joined up approach' involving one regional cancer centre and supporting cancer units[205] Centre provides specialist cancer treatments including for the most complex cancers, radiotherapy and a regional oncology service, with 5 cancer units, hosted by an acute hospital in each of the 5 HSC Trusts, providing most diagnostic tests, surgery and chemotherapy [p. 16][224] Due to be ready by the end of 2003 but was delayed, mainly for financial reasons (building costs higher than projected, etc.)	**Radiotherapy Activity Planning for Scotland 2011-2015** Prepared by the Radiotherapy Activity Planning Group for the Scottish Executive Health Department[225] Builds on a 2003 report for the government highlighting the need for an additional 5 to 10 linear accelerators to meet demand 2010-14 and tasked to "consider radiotherapy service capacity needs in Scotland for the period 2011 to 2015" , with a focus on LAs [p. 3]; notes that by 2007-08 Scotland will have 25 LAs (4.98 per m population) [p. iv]	**Designed to Tackle Cancer in Wales: A Welsh Assembly Government Policy Statement** Sets out Welsh government's policy aims and strategic direction to address cancer[226] Organised around the themes of the 2005 Designed for Life national vision for health and social care services by 2015 (prevention, early detection, improved access and better services), each of which presented with a defined policy aim Sets out a '3-year strategic framework 1' which defines key targets of what is to be achieved by March 2008 for each theme (total of 25), targets understood to be mostly strategic; a 'strategic framework 2' for the period 2008-2011 to be developed in due course, informed by progress made on targets set out in framework 1 [p. 19][226] Does not provide details on how implementation will be financed
			Scottish Radiotherapy Advisory Group established Formed as part of the 2006 Radiotherapy Activity Planning report; tasked to monitor clinical practice, coordinate radiotherapy developments to ensure equitable access across Scotland, repeat review of capacity and demand in due '3-4 years time' [p. vi][225] Replaced by the 'Radiotherapy Programme Board' in 2012 [p. 49][227]	**Radiotherapy Equipment Needs and Workforce Implications 2006-2016** Published by CSCG Radiotherapy & Chemotherapy Advisory Group B[228]uilds on CSCG 2002 strategic plan for cancer services which included a 12-year plan for radiotherapy services Examines provision of and need for radiotherapy in Wales; notes that existing radiotherapy capacity in terms of staffing and equipment does not meet cancer patient need in line with Welsh National Cancer Standards with waiting times found to be longer than elsewhere in the UK [ref: 2006 CSCG Radiotherapy report] Does not provide details on how implementation will be financed
2007	**Radiotherapy: developing a world class service for England** Prepared by the National Radiotherapy Advisory Group (NRAG), setting out state of radiotherapy in England, projected demand and resultant need for infrastructure/ equipment and associated workforce[229] As part of the release of the NRAG report, £5m of capital	**Regional Cancer Framework. A Cancer Control Programme for Northern Ireland** Commissioned in 2003, publisher unclear Described as "the first in the series of documents that will comprise the Regional Cancer Framework " [p. 5][221] Identifies 6 priority areas with a total of 55 recommendations (some with target year): (i) prevention, early detection and screening (7 recommendations); (ii)		**Review of Cancer Services for the People of Wales** Prepared by the Health & Social Services Committee of the National Assembly, advised by expert reference group appointed by the Committee Aim to review the "equality of provision and equity of access" to high quality cancer services in line with National Cancer Standards" [p. 13][232] Develops a total of 16 recommendations on service

	England	Northern Ireland	Scotland	Wales
	funding was committed to support training in radiotherapy treatment [p. 61][230] Followed by 'Radiotherapy Services in England 2012' published by the Department of Health National Radiotherapy Implementation Group (NRIG), established to "oversee and provide national support to local services in implementing the recommendations" of the 2007 NRAG report [p. 3][231] and reporting on progress	improving experience of people affected by cancer (6 recommendations); (iii) improving access to diagnosis and treatment (19 recommendations); (iv) research, information and audit (12 recommendations); (v) making it happen (4); equality impact assessment (7) Announces a number of follow-up activities to occur including publication of progress against the recommendations within 3 years with a formal review of the recommendations in 2011 [p. 51] According to Black and McKey (2017)[224] a formal action plan or review were not published; standards for the delivery of cancer services were finally published withing the 2011 Cancer Services Framework		capacity (securing funding for radiotherapy equipment; ensure stable workforce); commissioning, information technology; new treatments and drugs; cancer patient pathway; and palliative care
	Cancer Reform Strategy Published by the Department of Health; builds on progress since 2000 NHS Cancer Plan[230] Sets out a 'programme of action' in 10 areas, each with a set of 'pledges' to patients conveying actions to be taken: (i) prevention (3 pledges); (ii) early diagnosis (3); (iii) treatment (5); (iv) survivorship (4); (v) cancer inequalities (2); (vi) delivering care (3); (vii) information for quality improvement and choice (2); (viii) commissioning (3); (ix) investment (4); (x) building for the future (5) Does not provide details on implementation of the strategy, notes that National Cancer Director will deliver annual reports on delivery of the strategy, with an advisory board of stakeholders to be convened to provide input on annual reports [p. 131][230]			
2008	**National Awareness and Early Diagnosis Initiative launched** Partnership between Department of Health, NHS and Cancer Research UK with a major focus on "raising public awareness of the symptoms of cancer and the benefits of early diagnosis", encouraging early presentation, strengthening primary-secondary care interface to facilitate prompt onward referral for suspected cancer, improving GP access to diagnostic tests[233]	**Cancer Access Standards introduced** Defined as (i) 'at least 98% of patients diagnosed with cancer to start treatment within 31 days of the decision to treat' (by 2008) and (ii) 'at least 95% of patients urgently referred with suspected cancer to begin first definitive treatment within 62 days' (by 2009) [p. 209][234] From 2010 expanded to include breast cancer specific target (all urgent breast cancer referrals to be seen within 14 days, 98% of cancer patients to commence treatment within 31 days of decision to treat, and 95% of patients urgently referred with suspected cancer to begin first definitive treatment within 62 days) [p. 20][235] Subsequently referred to as three Ministerial targets: 62 Day Ministerial Target, 31 Day Ministerial Target, and 14 Day Ministerial Target [p. 21][224]	**Better Cancer Care, An Action Plan** Published by the Scottish Government[236] Sets out actions needed to support people with cancer, focusing on (i) prevention (10 actions), (ii) early detection (14); (iii) genetic and molecular testing (6); (iv) referral and diagnosis (9); (v) treatment (15); (vi) living with cancer (11); (vii) quality of cancer care (8); (viii) delivery (9); identified actions are directional, they do not describe milestones or responsible leads Does not provide details on the financing or plan implementation but highlights that the newly established Scottish Cancer Taskforce will "oversee the implementation of the actions [and] charged with ensuring that the network of advisory and delivery groups is streamlined and fit for purpose" [p. 7]	
			Scottish Cancer Taskforce established Replaces Scottish Cancer Group established in 1998; chaired by the Deputy Chief Medical Officer set up by the government to oversees the delivery actions set out in the 2008 Better Cancer Care plan[236]	
2009				
2010	**Delivering the Cancer Reform Strategy** Prepared by the National Audit Office; assessment focuses on 3 (of the 4) actions to drive delivery (actions 7-10) of the 2007 Cancer Reform Strategy: improving the quality of information (area 7), strengthening commissioning (8) and making better use of resources (9) Estimates 2008/09 NHS expenditure on cancer services at			

	England	Northern Ireland	Scotland	Wales
	£6.3m; Notes that the Department of Health had not monitored the cost of implementing the 2007 strategy, that there was “considerable variation in reported expenditure” between local purchasers (primary care trusts) and “unexplained variation in this expenditure from year to year” [p. 8][237] Provides 9 recommendations including that the Department of Health should “develop an action plan which identifies the roles, responsibilities and timelines” for taking action on improving consistency, timeliness and completeness of reporting of data on cancer (incl. costs and activity) and revise payment structure to incentivise best practices [p. 9]			
2011	**Improving outcomes: A strategy for cancer** Published by the Department of Health; presented as departure from previous strategies by seeking to “empower local organisations and frontline professionals to encourage the delivery of improved cancer care” [p. 4][238] with the specific aim “to save an additional 5,000 lives every year by 2014/15” [p. 5] while also reducing inequalities Overarching focus is on improving outcomes through action in 5 areas: (i) prevention and early diagnosis; (ii) quality of life and patient experience; (iii) better treatment; (iv) reducing inequalities; (iv) commissioning Does not specify defined actions or set targets/milestones for achievement, refers to a wide range of ongoing work Does not provide details on the implementation of the strategy	**Service Framework for Cancer Prevention, Treatment and Care** Published by Department of Health Social Services and Public Safety[234] Sets total of 52 standards for care continuum; each standard assigned one/a set of key performance indicators and expectations for their achievement within 3 years along with identified lead Described as a 3-year framework, expected to be reviewed regularly in light of new evidence; cites development of implementation plan for the framework [p. 47] but no such plan could be identified; also there does not appear to be an updated framework covering the period beyond the 3 years (i.e. post 2013-14), according to the 2015/16 Commissioning Plan, a ‘fundamental’ review for the Cancer Framework was “expected to be completed by HSCB/PHA by September 2015” [p. 13][239] It is unclear whether the standards were achieved as performance data are not publicly available [p. 8-9][224]		**All Wales Cancer Implementation Group (CIG) established** Year of formation inferred from ‘Together for Health: Cancer Delivery Plan for the NHS to 2016’ strategy[240] Described as being “well positioned to provide strong and joined-up leadership and oversight and to co-ordinate action in a strategic way” (p. 14) The CIG is expected to work in a co-ordinated way to support Local Health Boards to deliver outcomes; agree on how best to measure success; facilitate the sharing and implementation of best practice; and provide strategic guidance
	Cancer Drugs Fund (CDF) established Created by the government to enable access to cancer drugs “not routinely available on the NHS” [p. 5][241] Set out as an interim measure with additional funding until 2014, by which time a new system of ‘Value Based Pricing’ was expected to have been implemented [p. 60] [238]; this was not pursued and the Fund was extended to 2016; initial expectation of £200m per year in 2011/12 increased to £340m in 2015/16, with CDF exceeding its allocated budget each year since 2013/14 Following 2015 public consultation, CDF was established as a new ‘managed access scheme’ from 2016 [p. 5][241] to provide faster access and pharmaceutical companies a new fast-track route to NHS funding for promising new drugs [p. 6]			
2012	**Radiotherapy Innovation Fund established** Set up as a ‘single one-off revenue fund’ to be used in 2012/13 [p. 39][242]; initially set at £15 million but then increased to £23m to “support the roll-out of advanced radiotherapy treatment across the NHS in England” and ensuring that “all radiotherapy centres could deliver a minimum of 24% of all radical treatments using ‘inverse planned’ Intensity Modulated Radiotherapy (IMRT) by April 2013or as soon as possible thereafter” [p. 8][242] Also introduced new guarantee for access to innovative radiotherapy from April 2013[243]		**Detect Cancer Early (DCE) programme launched** Initiated by the Scottish government aiming to improve cancer survival through ‘actively addressing diagnoses and treatment at an early stage” [p. 25][244] Includes 5 workstreams: (i) public awareness; (ii) informed decision making on participation in screening; (iii) recognition in primary care and referral; (iv) increasing diagnostic capacity; (v) data, evaluation and outcomes	**Together for Health: Cancer Delivery Plan for the NHS to 2016** Described as providing a “framework for action by Local Health Boards and NHS Trusts” and sets out the Welsh Government’s expectations for population outcomes, NHS outcomes, how progress will be measured [p. 1][240]; sits in the context of the 2012 Welsh 5-year plan for the NHS 2012-16 Identifies 7 key areas for action, with a series of action points for each targeted at national and local levels: (i) prevention; (ii) early detection; (iii) fast and effective treatment and care; (iv) meeting people’s needs; (v) end-of-life care; supported by (vi) improving information and

	England	Northern Ireland	Scotland	Wales
				(vii) targeting research Requires Local Health Boards to report progress against agreed milestones which are to be published quarterly [p. 15]; further requires NHS organisations to monitor a set of quality metrics to be reported to the public with an initial set including 3 outcome measures and 7 NHS performance measures (e.g. timely treatment, stage at diagnosis, inclusion in clinical trials, assignment of key worker, care planning) Does not provide details on how implementation will be financed
2013	**National Cancer Action Team and regional cancer networks disbanded** Action team and regional cancer networks (number had reduced to 28) had provided support to commissioners and providers to implement cancer policy and services; role of regional cancer networks replaced by newly established ‘strategic clinical networks’ and ‘clinical reference groups’ taking broader health care roles of which cancer was one [p. 14][245] Function of National Cancer Action Team subsequently taken on by the Cancer and Blood National Programme of Care (part of NHSE specialised commissioning); National Radiotherapy Implementation Group (NRIG) replaced by the Radiotherapy Clinical Reference Group [p. 17][246]			
2014			**Revised Scottish referral guidelines for suspected cancer** First published in 2002 and revised further in 2007 and 2014 Development of the 2014 guidelines was led by a multidisciplinary steering group (convened in 2012), funded by DCE programme Overarching aim is to “facilitate appropriate referral between primary and secondary care for patients whom a GP suspects may have cancer”; guidelines were further revised in 2019[247]	**Inquiry into progress made to date on implementing the Welsh Government’s Cancer Delivery Plan** Published by the Health and Social Care Committee of the National Assembly for Wales[17] Reviews progress that had been made, in terms of whether performance measures as set out in the Plan are likely to be met by 2016, and by reviewing each Plan area, while also considering the appropriateness of the current level of cancer services funding; develops a total of 13 recommendations in Plan areas, as well as national level oversight function
2015	**Achieving world-class cancer outcomes. A strategy for England 2015-2020** Developed by Independent Cancer Taskforce established by NHS England in 2015[248] Similar to previous plans focus remained on improving outcomes Formulates set of principles as central to the implementation of the strategy such as co-design, devolved decision-making, external accountability; identifies 6 strategic priorities: (i) prevention and public health; (ii) earlier diagnosis; (iii) patient experience; (iv) supporting people with cancer; (v) investment; (vi) commissioning and service delivery; formulates a total of 96 recommendations across the strategic priorities such as establishing integrated Cancer Alliances at sub-regional level to lead local cancer service improvement; including recommendations for implementation of the strategy (e.g. establishing a ‘properly resourced’ National Cancer Team to lead implementation [p. 73][248] and an independently chaired National Cancer Advisory Board to oversee and advise on implementation and report to government annually)	**Acute Oncology teams introduced across all cancer treatment units** Follows process of establishment of a regional Acute Oncology steering group in 2011, with roll-out of AO services beginning in 2013 and fully operational across all five Health and Social Care Trusts by March 2016[249] Introduction of AO teams mentioned in the 2015/16 Commissioning Plan [p. 62][239]		**Wales Cancer Network formed** Established as a merger of north and south Wales Cancer Networks and the National Specialist Advisory Group, which aims to “simplify the organisational landscape of cancer services in Wales [and] provide a single, patient focused, clinically led organisation integrating Welsh Government, Health Boards and cancer service stakeholder groups including the 3rd sector”[250] Wales Cancer Network is overseen by the Cancer Implementation Group

	England	Northern Ireland	Scotland	Wales
				Together for Health Cancer Delivery Plan Annual Report 2014 Published by the Welsh Government[251] Reports on progress that had been made in cancer services in relation to the 2012 Together for Health Cancer Delivery Plan. Notes that the report is the third in a series of annual reports, but only one earlier report for 2013 is documented although not retrievable
2016	**Achieving World Class Outcomes: Taking the Strategy Forward, 2016** Published by NHS England; sets out 'steps' to achieving the 2015 Achieving world-class cancer outcomes strategy by 2020 with a focus on "the major building blocks for change" [p. 3][252] Identifies 6 key workstreams for implementation in line with the 6 strategic priorities of the 2015 strategy, setting out specific actions with milestones for each: (i) prevention and public health (3 actions); (ii) early diagnosis (5 actions); (iii) patient experience (5 actions); (iv) living with and beyond cancer (4 actions); (v) high-quality modern services (6 actions); (vi) commissioning, provision and accountability (5 actions) and investment (no specific action identified, refers to action in other priority areas) Implementation to be overseen by a newly established National Cancer Transformation Board, the National Cancer Director and a new National Clinical Director for Cancer along with a National Cancer Advisory Group	**North West Cancer Centre opened** Located at Altnagelvin Hospital in Londonderry and second radiotherapy site in NI; construction and running costs jointly funded by Health Departments in Northern Ireland and the Republic of Ireland to provide radiotherapy services and other cancer treatments to patients in Western and Northern Trusts and patients from Donegal (Ireland) with radiotherapy services [p. 16][224]	**Beating Cancer: Ambition and Action** Published by the Scottish Government[244] Sets out "new actions" building on progress that had been made over the decade preceding the report Focuses on 8 areas (some of which similar to previous plans/strategies) and a set of actions within each (total of 53 actions): (i) prevention (6 actions); (ii) screening ('improving survival') (9 actions); (iii) early detection and diagnosis (10 actions); (iv) improving treatment (11 actions); (v) workforce (3 actions); (vi) living with cancer (8 actions); (vii) quality improvement (3 actions); (viii) research; defines a set of 'ambitions' for each identified area as well as a set of actions (3 actions) Similar to the 2008 plan actions are not further specified into milestones, measures of success or responsible leads [ref: 2016 Beating Cancer] SCT responsible for overseeing actions in the cancer strategy[253]	**Cancer Delivery Plan for Wales 2016-2020** Prepared by the Wales Cancer Network[254]; described as a 'refreshed delivery plan' which builds on and continues key themes identified by the 2012 Delivery Plan; formulates a total of 76 actions across the 7 themes ('domains') targeted at national, health board or trust level; specifies 3 'service measures' for each domain Does not provide details on how implementation will be financed
	Cancer Alliances beginning to be established across England Bring "together the key organisations in their area to coordinate cancer care"[255]; tasked to lead the implementation of the 2015 cancer strategy locally and to explore and test new more effective ways of organising and paying for cancer services[256]; by 2020 there were 21 Cancer Alliances across England.			
2017	**Cancer Workforce Plan: Phase 1: Delivering the Cancer Strategy to 2021** Developed by Health Education England through reprioritising "its budget and internal resources to support delivery of the Cancer Taskforce recommendations"[p. 4][257] Sets out a "pragmatic plan to increase the net supply of numbers and skills in the short term" [p. 6] in cancer, alongside a wider workforce strategy (2018) Describes (i) immediate/ongoing actions incl. specifying investment in, e.g., an additional 746 Consultants working in cancer by 2021 plus 668 FTE more clinical radiologists, 243 FTE more oncologists, etc. [p. 6]; (ii) expansion of skills over 10 years through a "rough a national dedicated SkillsFund" [p. 6]; (iii) increase the net number of trainees over 2015 years			
2018 and after		**A Cancer Strategy for Northern Ireland 2021-2031** out for public consultation (August 2021)		

Note. Green colour – 'event'; orange colour – published cancer plan or strategy; blue colour – evaluation, progress report or cancer system review

Supplement Table S.6. Cancer plan/policy financial commitments across jurisdictions

Jurisdiction	Plan or policy		Financial commitments
Australia			
Commonwealth	2010	Delivering Better Cancer Care	Notes a total financial commitment of > AU$ 2bn over the past 3 years including[45]: - Infrastructure: AU$ 1.3bn (investment in 2 integrated cancer centres in Sydney and Melbourne; support of network of 8 new, upgrade of 7 existing regional cancer centres, 4 patient accommodation projects) - Prevention: ~ AU$ 1bn - Other: AU$ 600m for cancer drugs, ~ AU$ 200m for screening programmes; ~AU$ 100m for specific projects [ref: 2010 Delivering Better Cancer Care]
	2012	COAG Working Plan	Implementation of the Plan overseen by NCERG "with funding for projects from the Australian Health Ministers' Advisory Council (AHMAC) cost-shared budget, the Commonwealth and jurisdictions" [p. 1][52] Total allocated budget between 2012/13 and 2015/16 was AU$ 970k, of which ~ 3/4 to support work programme projects (remainder to Secretariat) [49]
	2015	Optimal Cancer Care Pathways	2015 national endorsement by the Australian Health Ministers Advisory Council was for 15 OCPs for initial implementation in 2016/17; this was supported by an allocation of AU$ 198,150 from the cost shared budget [p. 4][58]
New South Wales	2004	NSW Cancer Plan	Plan does not provide details on financing of implementation of the plan but the two-year progress report notes funding allocations in defined areas during 2005-06, amounting to a total of ~AU$ 29m: screening (AU$7.9m); infrastructure (AU$5.2m); MDTs (AU$1.5m); technology/equipment (AU$13.5m); patient transport (AU$500k/a)[35]
	2010	Radiotherapy Services in NSW Strategic Plan to 2016	Notes that since 1995, NSW had invested AU$ 150m to expand access/increase capacity of services through new /replacement linear accelerators; and since 2003/04 AU$ 13m had been allocated to operate additional treatment machines Investments in workforce included AU$ 20m for new positions for radiation therapists and salary for Radiation Oncology Medical Physicists, plus ~AU$ 2.5m for education (2004/5-2009) Mentions new commitments of AU$ 70m to establish new services/expand existing services/regional cancer centres[48]
Victoria	2008	Victoria's Cancer Action Plan 2008-2011	Notes that new government funding of AU$ 150m over four years had been allocated across four action areas (prevention/screening AU$ 24m; research AUD$78.8m; treatment AU$ 18.4m; patient support AU$ 28.8m); each area includes a workforce development component, with AU$ 24.8m (of the total of AU$ 150m) allocated to support workforce improvements (including funding for 73 new positions across Victoria) An additional AU$ 70m committed by Victorian government to capital and infrastructure in 2008/09 to invest into/support radiotherapy centre in Melbourne (AU$40.6); Olivia Newton-John Cancer & Wellness Centre (AU$25m); Comprehensive Cancer Centre (AU$5m) [p. 55][44]
	2016	Victorian Cancer Plan 2016-2020	Plan does not provide details on financing of plan implementation; mentions some investment commitments by the Victorian government, e.g. AU$ 60m towards cancer service infrastructure, recurrent funding of AUS 15m p.a. for VCA; AU$ 25m over 4 years to support genomic sequencing capability[47]
Western Australia	2005	WA Health Cancer Services Framework	Sets out financial commitments by the WA Government to support implementation of the Framework of a total of AU$ 30m over 4 years (specific care strategies AU$ 16m; palliative care AU$ 4m; translation of cancer research AU$ 6m; skin cancer prevention programme AU$ 1.2m; infrastructure for colorectal screening AU$ 2.8m); plus an additional AU$ 12m for purchase of 2 additional radiotherapy machines as 'phase 1 of the State Cancer Centre [p. 3][38]
Canada			
Federal	2004	First Minister's 10-Year Plan to Strengthen Health Care	Canadian Government established $5.5 billion fund to assist provincial and territorial efforts to reduce wait times[77] Supported further by the 2007 budget providing > $1 billion to assist the implementation of Patient Wait Times Guarantees across jurisdictions, including (i) a $612 million Patient Wait Times Guarantee Trust (2007/08-2009/10) to help jurisdictions introduce guarantees; (ii) a $400 million enhancement to Canada Health Infoway for the development of information systems and electronic health records to assist in advancing Patient Wait Times Guarantees; (iii) a Patient Wait Times Guarantee Pilot Project Fund (2007/08 – 2009/10) of up to $30 million, to assist provinces and territories in testing innovative approaches to advancing and establishing Patient Wait Times Guarantees; pilot project fund supported projects in 8 provinces/ territories testing guarantees in different clinical areas[78]
	2006	The Canadian Strategy for Cancer Control: A Cancer Plan for Canada	Outlines a five-year financial plan setting out the "financial requirements of implementing the CSCC by strategic investment area" [p. 16][69], with a total of Can$ 260 million over the period 2006-2010 ($25m per year), of which [p. 14]: - ~$39 m for pan-Canadian coordination, incl. New Initiatives Program, provincial development grants, capacity building, knowledge platform, IT - $ 52.2m: primary prevention and screening - $43.8m: 'Cancer patient's journey, incl. $ 18m standards development (standards and performance indicators for cancer diagnosis, treatment and care); $10.3m clinical practice guidelines development, $15.5m 'balance focus' (cancer supportive and palliative care) - $12m: cancer control workforce (incl. developing coordinated pan-Canadian cancer workforce strategy re: repatriation, recruitment, retention and training) - $50.8m cancer research - $50.2m: cancer information and access, including surveillance - $12m: quality and performance assurance

Jurisdiction	Plan or policy		Financial commitments
			Canadian Partnership Against Cancer established in 2007 and tasked with implementing the CSCC was supported by Can$ 250m for 5 years[80], with its renewal in 2011 for 2012-2017 supported by a further Can$ 250m [p. 75][81]
	2012	Sustaining Action Toward a Shared Vision	Implementation of the strategic plan linked to the 2011 renewal of CPAC mandated by Canadian government for period 2012-2017, with a total budget Can$ 250m for the entire period (total reduced by 3.6% as a result of the March 2012 federal budget, or ~ $9m) Strategy does not provide a breakdown by initiative[94]
Alberta			Published cancer plans/strategies do not provide information on financing of the plan or strategy *(Published Alberta Government budgets mention investment in cancer infrastructure, equipment, workforce and programmes, but these are typically included in the overall health budget and not detailed by specific investment, with few exceptions, such as the 2008 budget which explicitly mentions new funding of Can$ 31m to in 2008-09 to “begin implementing a guaranteed maximum wait time of eight weeks for cancer radiation therapy by 2010 as part of the agreement with the federal government. Part of this plan is to expand radiation services to Lethbridge, Red Deer, and Grande Prairie” [p. 33][84]*
Manitoba	2007	Cancer Services in Manitoba. A Strategic Framework	Does not provide details on financial commitments and instead list a series of investments in infrastructure and equipment of total of ~ CAN$ 35m but the timeframe for these investments unclear and they also include non-cancer investments[82]: - Can$ 7.7m for new and replacement linear accelerators, - >Can$ 7m for purchase of 1 PET scanner - Can$13.3m for cancer drug funding - ~Can$ 11m for infrastructural work e.g. specialised treatment for prostate disease incl. cancer and expansion of outpatient chemotherapy at one hospital, etc) - plus ~ Can 2.5m for prevention initiatives such as provincial tobacco control strategy The 2012-2017 Cancer Strategy lists some investments that have been made following 2007 framework, including[93]: - $24 million for development of the Western Manitoba Cancer Centre as the 1st facility to provide radiation therapy outside of Winnipeg, as well as chemotherapy and outpatient care - increasing # of oncology specialist positions by ~ 50% - more than doubling oncology drug budget - building additional 5 rural community sites to provide chemotherapy
	2011	Manitoba Cancer Plan 2011-2015	Allocates Can$ 40m over 5 years for the Manitoba Cancer Patient Journey Initiative Provincial government commitment of Can$ 70m to the new CancerCare Manitoba facility to “facilitate improved cancer diagnostics, treatment and research”[p. 21][91]
Newfoundland and Labrador	2010	Gaining Ground. A Provincial Cancer Control Policy Framework for Newfoundland and Labrador	Notes “increased investment in cancer related services, over Can $125 million in the last seven years” which had enabled “the expansion and enhancement of regional cancer centres and programs across the province and the use of technology such as teleoncology” (p. 3)[88]; further mentions investments in response to the 2009 Cameron Inquiry, “including enhancements to laboratory services, Can$ 12.6 million for new medical equipment to treat cancer and Can$ 12.7 million for the development of electronic health and patient records” (p. 4); unclear whether these investments are included in the total of $125m.
	2015	Ministerial Statement	Notes a total investment of Can$ 172m in cancer control over ‘the past decade’; much of the update is on prevention and screening, including a ban on smoking in vehicles (2011), regulation of tanning bed facilities (2013/14), colon cancer screening programme
New Brunswick			Published cancer plans/strategies do not provide information on financing of the plan or strategy
Nova Scotia	1998	Cancer Care Nova Scotia established as provincial programme	CCNS operational funding rose from $3.6 million in 1997; $4.2 million in 2001; to just over $4.3 million in 2006 [p. 324][118]
			Published cancer plans/strategies do not provide information on financing of the plan or strategy *(Published Nova Scotia Government budgets mention investment in cancer infrastructure, equipment, workforce and programmes, for example, a Can$ 72m investment “to support major hospital and community health care projects” including “purchase and install three new radiation therapy units for the Capital Health District” in the 2011 budget[258])*
Ontario	2005	Ontario Cancer Plan 2005-2008	Plan requests funding of a total of Can$ 600m, including[113]: 1. Volume investment for screening (Can$ 23.7m); treatment volumes (Can$ 114.4m); cancer drugs (Can$ 140m); rapid access services (Can$ 3.4m) over three years (2006-2008) 2. Transformational investment, i.e. an increase of ~2% on the Can$ 2b spent on cancer services in Ontario at the time 3. Capital investment of Can$ 275m over 3 years of which majority (Can$ 220m) is for 7 new capital projects and remainder (Can$ 55m) for radiation equipment (additional capacity, replacement and upgrades)
	2008	Ontario Cancer Plan 2008-2011	Plan commits to ‘New improvement and innovations investments’ (total of Can$ 116.4m)[116]: Volume investments (total of Can$ 192.1m, including Can$ 205m for cancer drugs; Can$ 47.4m for screening and Can$ 197.9m for treatment) and capital investments (total of Can$ 66m while highlighting that capital costs for new cancer centre projects are “embedded in Infrastructure Ontario projects” p. 33) for the period 2009-2001 [ref: 2008-2011 cancer plan]

Jurisdiction	Plan or policy		Financial commitments
	2011	Ontario Cancer Plan 2011-2015	Similar to previous cancer plans presents required budget over the four years of the Ontario Cancer Plan, with the total incremental funding estimated to be ~ Can$ 800m, including for cancer treatment, cancer drugs; cancer screening; capital investment [overall estimated budget not disaggregated by area][115]
Prince Edward Island			Published cancer plans/strategies do not provide information on financing of the plan or strategy
Quebec			Published cancer plans/strategies do not provide information on financing of the plan or strategy *Various documents mention specific investments, e.g. the 2011 assessment of the 2007-2012 Priority Directions mentions Can$ 2.5m in support of cancer research over the period 2007-2012 and a recurring nearly Can$ 1m annually in resources (radiotherapy equipment) over the same period*[124]
Saskatchewan			Published cancer plans/strategies do not provide information on financing of the plan or strategy Some documents mention specific investments, e.g. an allocation of Can 2.5m by the Saskatchewan Government to the Surgical Care Network[109]
Denmark			
	2000	Cancer Plan I	Plan notes that its recommendations will have resource implications in several areas while highlighting that "it has not been possible to quantify the precise resource needs associated with each recommendation" (p. 152). This was explained, in part, by variation current practice across hospitals and differences in capacity which was to be addressed at county level. However, the plan quantified resource needs for some areas, incl. radiotherapy, medical treatment of cancer, Screening (breast, colorectal cancer) and clinical databases along with estimates for scanning capacity published subsequently. Estimated costs include: - DKK 54 million for medical treatment (oncological drugs; breast, small-cell lung, cervical, advanced bladder, anal, colorectal) - DKK 50 million for additional inpatient care and DKK 31 million for outpatient care (costs for staff etc.) - DKK 340 million mammography screening set-up & first 2 years, DKK 50 million/year after - DKK 200 million colorectal cancer screening first 2 years (set up & operation) - Plus costs for setting up databases and continuing medical training / cancer surgery - DKK 250 million for expansion of radiotherapy capacity 2000/01 (assuming 3-4 LAs per year)
	2005	Cancer Plan II (2005) and Cancer Pan II follow-up (2007)	2005 Budget Act allocated[159]: - DKK 300 million to a loan fund for the purchase of accelerators (Section 9.3.2) - DKK 100 million appropriation to an effectiveness fund to which the county hospital authorities can apply for support to enhance the effectiveness of cancer treatment, including radiotherapy (Section 9.3.2) - funds for the establishment of new hospices so as to ensure nationwide hospice capacity corresponding to a minimum of 12 beds in each County. By the end of 2004, palliative care teams had been established by virtually all the Counties and Copenhagen Hospital Corporation (Section 10.3.2) Ministry of the Interior and Health also established a DKK 300 million loan fund for CT and MR scanners in April 2005 Cancer Plan II follow-up (2007) further notes[167]: - various financial commitments to upgrade radiation therapy infrastructure of a total of DKK 600m during 2005/2006 - 2007 Budget Act allocates DKK 76m to government 'activity-dependent radiotherapy pool in the cancer field' to compensate regions for any additional radiotherapy activity beyond a specified target level - 2005 government commitment to allocate DKK25m to doctor's continuing education in cancer treatment Cancer Plan III Agreement further lists a range of financial commitments for the cancer field since 2005[180]: - From 2005 (to 2010): DKK 2.25 billion for loan pools for cancer equipment 2006 - Mammography screening: DKK 30m - Cancer medicines: DKK 200m - Productivity enhancements (?): DKK 50m - Clinical research: DKK 25m - Experimental cancer treatment: DKK 15m - Rehabilitation: DKK 20m 2007 - Cancer medicines: DKK 300m - Experimental cancer treatment: DKK 143m - Introduction of CPPs: DKK 225m - Radiation therapy: DKK 108m 2008

Jurisdiction	Plan or policy		Financial commitments
			- Introduction of CPP programs: DKK 175m - Radiation therapy: DKK 208m Plus DKK 25m in 2008 and DKK 183m annually from 2009 for cervical cancer vaccine
	2010	Cancer Plan III Agreement	Sets out financial commitments for Cancer Plan III, including[180]: CPPs - 2011: DKK 1m for the development of a CCP for nonspecific symptoms of serious illness that may indicate cancer - From 2012: DKK 85m annually to regions for implementation of the above CPP GP education on referral to CPP - 2011: DKK 4m - 2012: DKK 6m Cancer symptom awareness campaign - 2011: DKK 3m Rehabilitation and palliation - 2011: DKK 1m for the development of a programme of rehabilitation and palliation for cancer patients - 2012: DKK 30m for the implementation of above programme across regions and municipalities (and from 2013 DKK 40m annually) Cancer treatment abroad: patient information 2011: DKK 1m Strengthening monitoring and quality development - 2011: DKK 2m annually
	2016	Cancer Plan IV	Commits DKK 1.5 billion in 2017-2020 for cancer efforts (in addition to a commitment of DKK 170 million annually from 2017 to increased cancer screening capacity)[195] A total of just over DKK 1.1 billion is allocated for increased capacity for diagnostics and treatment and a number of measures for improved treatment quality, patient involvement and prevention (according to Finance Act 2017 Strengthened Health and Cancer Plan IV). The priority comes in addition to initiatives in the cancer area in the Agreement on the rate pool for 2017-2020 for a total of DKK 331 million as well as earlier priority increases to the cancer investigation of DKK 680 million for 2017-2020.
Ireland			
	1996	Cancer Services in Ireland: A National Strategy	Notes investment of IR£15m for upgrading of St Luke’s Hospital including equipment (3 linear accelerators); IR£1.1m for breast cancer screening programme made available from 1995; a total of IR£1.1m for palliative care provided by GPs during 1994-1996 plus IR£75k each year for related GP training[139] 2003 evaluation[141] of the Strategy noted that “estimated cost of implementing the Strategy were around IR£ 25m but found that by 2002, ~ €400m had been invested (~IR£315); evaluation further noted that the Strategy had “resulted in the allocation of a dedicated budget to cancer services” (before funding for cancer services was through acute hospital budgets) [p. 7] Investment of €400 and prioritisation of cancer services considered to have “impacted significantly on the quantity and quality of service provision, e.g. 85 specialist consultants (including 15 medical oncologists) and 245 clinical nurse specialists have been appointed to the services since 1997” [p. 7]; notes further investments: -€3.5m for cancer research trials -cumulative increase in cancer funding across health boards between 1997 and 2003 of ~€352m (=1477% increase in spend) capital funding: ~€87m specifically for the development of cancer related initiatives (incl. radiation oncology equipment of ~€55m in different parts of the country; €3m for general oncology services) -dedicated funding for palliative care and cancer agencies 2014 Report on the implementation of the 2006 Cancer Control Strategy lists further investments that had been made[160]: - Radiation Oncology: €26m [+105 WTE] (2007-2011; after 2011, radiation oncology services were directly funded for development priorities) - Symptomatic breast cancer services: €13.5m [+51 WTE] (2007, 2008) - Rapid access clinics: €13.3m [+88 WTE] (2009) - Surgical and medical oncology: €8m [+25 WTE] (2010) - Theatre and critical care support: €1.5m [+28 WTE] (2011) - Oncology drug funding: € 20.5m (2013-2014) - BowelScreen & Diabetic RetinaScreen: €19m [+20 WTE] (2012-14)
	2006	A Strategy for Cancer Control in Ireland	Strategy led to the establishment, in 2007, of the National Cancer Control Programme (NCCP) within the Health Service Executive (HSE) and the NCCP was subsequently included in HSE annual national service planning/

Jurisdiction	Plan or policy		Financial commitments
			The 2009 National Service Plan[173] details commitments of €21.75m in the 2007/08 budget and €36.75m in the 2009 budget (commitments include the National Plan for Radiation Oncology (NPRO)); the 2009 budget includes: - €3m new development funding for rapid access diagnostic clinics for lung cancer developed in 8 of the specialised centres, with centralised lung cancer surgery in 4 of these centres - €3.4m new development funding for rapid access diagnostic clinics for prostate cancer developed in 8 of the specialised centres - €1m new development funding for National centre for neurosurgical cancer - €1m new development funding for National centre for complex head and neck cancer - €1m new development funding for National centre for pancreatic cancer - €1m new development funding for oncology theatre developments to support the 8 designated centres and their cancer programmes - €1.53m new development funding for programme of GP training to aid with cancer referral and surveillance - €0.5m new development funding for patient transport support scheme - €1.7m new development funding for capital development plan in Beaumont and St. James Hospitals, as part of the National HSE Radiation Oncology Network (Phase 1) - €0.87m new development funding for the further recruitment to commence in relation to National Plan For Radiation Oncology Posts Financial commitments are in addition to continued investment in the transfer of specialised oncology surgery into 8 cancer centres (2 each in 1 of the 4 cancer control networks) by up to 90% of all specialised cancer surgery. The 2010 National Service Plan[174] details a commitment of €56.75m to continue the centralisation of specialised cancer surgery and the and the completion of capital projects, following the 2006 cancer strategy, and specifically: -€8.6m for lung prostate and pancreatic developments and any additional costs of private radiotherapy facilities - €4m for the development of community oncology - €0.5m for the development of centres for the treatment of complex skin cancers - €1.4m for ensuring minimum of 2 medical oncologists in every hospital with inpatient oncology beds - €1m for additional theatre supports for designated centres and other new cancers - €4m for capital development plan in Beaumont and St. James Hospitals 2014 Report on the implementation of the 2006 Cancer Control Strategy lists further investments that had been made[160]: - Radiation Oncology: €26m [+105 WTE] (2007-2011; after 2011, radiation oncology services were directly funded for development priorities) - Symptomatic breast cancer services: €13.5m [+51 WTE] (2007, 2008) - Rapid access clinics: €13.3m [+88 WTE] (2009) - Surgical and medical oncology: €8m [+25 WTE] (2010) - Theatre and critical care support: €1.5m [+28 WTE] (2011) - Oncology drug funding: € 20.5m (2013-2014) - BowelScreen & Diabetic RetinaScreen: €19m [+20 WTE] (2012-14)
New Zealand			
	2003	The New Zealand Cancer Control Strategy	The Strategy document does not provide ny financial details on the implementation of the plan The development of the strategy was funded by MoH and CCT, with CCT receiving NZ$700,000 from the Cancer Society of New Zealand and the Child Cancer Foundation over the period 2001-2004 [p. 81][75]
	2005	The New Zealand Cancer Control Strategy: Action Plan 2005–2010	The Plan does not provide details on financing of its implementation According to Caron et al. (2007), the NZ government committed NZ$ 40m in 2005 for the first phase (2005-06), including[75]: - Screening (breast, colorectal): $13,2m - Primary prevention incl. smoking prevention/cessation: $8.6m - Palliative care, rehabilitation: $ 6m - Treatment services: $ 5.3m - Cancer drugs: $ 4m - R&D: $3.2m - Workforce development: $1.1m - Implementation Fund: $1.75m (to fund 23 local projects proposed by DHBs and NGOs) The $40m were expected to then become 'part of baseline funding for the subsequent 4 years and which was in addition to cancer control activities already occurring at national and regional levels [p. 81-82][75]

Jurisdiction	Plan or policy		Financial commitments
	2008	Development of national Cancer Control Programme	Cancer Plan 2015-2018 lists government investments that had been made between 2008 and 2014, including[191]: - NZ$ 63m for the faster cancer treatment programme - NZ$ 34m for upgrading of screening technology (mammography) and bowel screening pilot - NZ$ 15m for specialist palliative care services - unspecified funding for the purchase of 10 new linear accelerators in public hospitals - NZ$ 60m for primary prevention initiatives such as reducing smoking and health eating The Plan Further mentions the 2014 Budget which "delivered an additional $32.7 million over four years to further improve cancer services and provide better support for cancer patients" [p. 5][191], specifically - to establish supportive care services for cancer patients and their families - information systems to support multidisciplinary meetings - to reduce wait times for colonoscopies and increase breast and cervical screening coverage It sets out a 'Cancer Service Improvement Fund' of NZ$ 11.2m for five years allocated to projects operated by DHBs and regional cancer networks to improve the quality of care and ensure that patients are seen in line with the wait time target (see below)
	2012	Faster Cancer Treatment programme	The programme for better and faster services for cancer patients was allocated NZ$ 33m over four years in operating funding as per 2012 Budget [p. 3][259]
Norway			
	1998	National action plan for strengthening cancer care	Provides detailed breakdown of financial commitments for the 1997 Cancer Plan, with a total public investment of NOK 2.1 bn for the period 1999-2003, of which: - NOK 1bn for increased operating expenses (NOK 160m for prevention; NOK 370m for early diagnosis; NOK 160m for treatment; NOK 210m for workforce education; NOK 100m research) - NOK 1.1bn for investments (NOK 480m for radiation machines; NOK 572m for other infrastructure investments) Funding is in addition to 1998 budget commitments (~ NOK 400m) plus proposals for increased appropriations in the 1998 state budget and 1999 budget Additional NOK 2.3bn set aside in budget for investment in medical technical equipment in hospitals (replacing existing equipment, procurement of new equipment, plus NOK 5.3bn to be invested over 5 years with municipal co-financing[143] 2006 cancer strategy notes that in addition to the NOK 2bn for the period 1999-2003, a further NOK 2m in 2005 and NOK 5m in 2006 had been allocated to cancer treatment programmes; the 2006 strategy also notes that the government had additionally committed to the co-financing of expensive drugs for hospitals including cancer drugs, at NOK 18m in 2005 and in 2006 [p. 5][156]
	2004	National strategy for work within cancer	Chapter 14 of the document is dedicated to 'Financing cancer care' but the focus is on general financing challenges as they relate to cancer, such as spending on cancer drugs, fragmentation of financial flows between providers, etc. No detail on financing of proposals given[158]
	2006	Cancer Strategy 2006-2009	Does not provide details on the financing of the strategy but 2006 budget notes that the Directorate for Health and Social Affairs will be allocated NOK 0.7m for the creation of the a 'dedicated post' to be established within the Directorate to lead on the implementation of the strategy [p. 55][260]
	2013	Together – against cancer. National Cancer Strategy 2013–2017	Does not provide details on financing of the strategy but notes that the implementation of the (sub)objectives is to be ensured by "the health authorities and health services within their areas of responsibility and financial frameworks. In some areas it may also be necessary to reallocate resources" [p. 6][171] Notes that since 2005 specialist health services had been allocated around NOK 12bn (unclear whether this is all specialist services or cancer only) [p. 4][171]
	2015	National Action Plan for Cancer 2015-2017	Does not provide details on financing of the action plan but notes that measures to be taken should build on existing structures; notes that some measures will require new funding (e.g. the introduction of national user surveys, p. 8) while others may need to be covered from existing resources (e.g. the introduction of cancer coordinators to better coordinate specialist and primary care, p. 15)[192]
United Kingdom			
England	1996	Clinical Outcomes Group (COG) established	Implementation of COG guidance was centrally supported with £10m per year committed to reducing waiting times (1997 for breast cancer, 1998 for colorectal, 1999 for lung) [p. 6][202]
	2000	NHS Cancer Plan	Notes that "Cancer services will receive an additional £280 million in 2001/02, £407 million in 2002/03 and £570 million by 2003/04" [p. 92][207] but this is not further broken down in terms of allocation; notes specific investments throughout the document, such as: - £80m per year to improve standards and cut waiting times [p. 8] - £50m by 2004 for palliative care - £2.5m per year training programme for surgeons [p. 13] - £140m for continuing professional development [p. 81] - additional funding for the purchase of equipment in addition to existing funding through the New Opportunities Fund to modernise cancer equipment at £93m [p. 84] - £40m per year for cancer research [p. 86] 2005 NAO progress report notes that that investment in the first year (2001/02) was lower than the target (£199m vs £280) but was followed by a period of 'catching up' and an expectation that the £570m target for 2003/04 would be met [p. 9][208]; by the end of 2004 all plans in terms of investment in facilities had

Jurisdiction	Plan or policy		Financial commitments
			been achieved, with over £400m having been invested (with 68 MRI scanners, 177 CT scanners, 83 linear accelerators and over 700 items of breast screening equipment since April 2000), £28m invested to support upgrades and reconfigurations in 39 pathology sites [p. 16], investment in staff targets also broadly achieved 2007 Cancer Reform Strategy notes that an additional £639m had been invested between 2000/01 and 2003/04 “exceeding the NHS Cancer Plan objective of £570m” [p. 21] [230], with over £500m invested in additional and replacement equipment for cancer incl. 167 new linear accelerators by 2007 [p. 60]
	2007	Cancer Reform Strategy	Does not provide details on financing of the implementation of the strategy but notes that a total of £4.35 billion had been spent on cancer services in 2006/07 (5.2% of all NHS spending) and that the cancer workforce had expanded ‘significantly’ between 2000 and 2006, with almost 50% more consultants specialising in cancer in 2006 compared with 1997 [p. 118][230] Mentions an impact assessment providing details on estimated costs published alongside the strategy but document not available; according to Richards et al. (2018), the 2007 strategy was not accompanied by ‘additional dedicated funding’ [p. 7] [261] 2010 NAO report notes that the cost of implementing the 2007 Strategy had not been monitored by the Department of Health [p. 8][237]
	2011	Improving Outcomes Strategy	Does not provide details on financing of the implementation of the strategy; accompanying impact assessment specifies the anticipated costs of strategy implementation set against project benefits but does not provide information on additional commitments[262] 2014 Annual Report on Improving Outcomes notes that the strategy had invested ‘£750m in improving cancer services’ which included £450m to improve early diagnosis [p. 6][263]
	2012	Radiotherapy Innovation Plan	2014 Annual Report on Improving Outcomes notes that, in 2012, the Fund of £23 million had been distributed to 50 centres to support the development of IMRT techniques and “meet the Prime Minister’s pledge that all patients eligible for innovative radiotherapy, where clinically appropriate and cost effective, should have access to it.” [p. 52][263]
	2015	Achieving World Class Cancer Outcomes	Estimates costs of proposed recommendations to be around £400m per year [p. 6][256]; dedicates one chapter to outlining the likely costs of implementing the strategy, including additional resources required (while also setting out likely savings incurred by the investments) over the period 2016/17-2020/21, estimating this is be a total of between £666m to £1,360m: - prevention and screening: £27m - early diagnosis: £354m-£1,050m - molecular diagnostics: £22.5m - living with cancer: £194m - commissioning and data sets: £10m - Excess Treatment Costs (ETCs) for radiotherapy studies: £21.5m - pilot activity: £22.5 - Cancer Alliances/Clinical Reference Groups: £15m additional capital costs for replacing/upgrading equipment (LAs, PET, MR) of ~£212m over 5 years savings estimated to result from earlier diagnosis, direct GP access to tests, stratified pathways, savings from centralised procurement, among others: £380-£575m per year [p. 75f][256] 2016 Implementation Strategy does not specify how implementation will be funded[256] although 2015-16 progress plan mentions a £130 investment to upgrade radiotherapy equipment, and an overall investment of ~£600m over the period 2017/18-2020/21 to achieve the outcomes set by the 2015 strategy (there is no further breakdown about the allocation of funding) [p. 33]
Northern Ireland	2002	Inquiry into the delivery of cancer services in Northern Ireland	Report provides some financial figures on investments in cancer, including[205]: - estimated cost of Regional Cancer Centre: £60m plus £10.5m annual operating costs (at time of Inquiry unclear “where the money will come from” - recurrent increased funding for cancer services from 1999 of £13m per annum (“has helped to meet the significant increase in drug costs, enabled the improvement in premises infrastructure and provided for the appointment of over 200 additional cancer service staff”) - lists an additional £9.2m that had been allocated for specific new projects in 2001, to help to provide both an urgently needed MRI and CAT scanner at the Belfast City Hospital - highlights that “significant extra funding” would be needed to “continue the improvements” (e.g. £1.27m for additional 13.5 consultant oncologists and 8 trainees; £11.35m for equipment as part of the Regional Cancer Centre) - notes that the Campbell Commissioning Project Board estimated that in addition to the funding needed to support capital investments at the Regional Cancer Centre (of ~£17-20m) a further £15.4m would be “required from 2000/01 to 2003/04 to expand cancer services at the Cancer Units”
	2007	Regional Cancer Framework. A Cancer Control Programme for Northern Ireland	Mentions some financial figures mainly around past spending, including[221]: - a total of £73m that had been allocated to capital funding for cancer services over 1996/97 to 2004/05 of which a large portion (~£58m) went to the Belfast Regional Cancer Centre - allocation of ~£28m recurrent and £1.3m non-recurrent additional funding for cancer services over 1996/97 to 2004/05

Jurisdiction	Plan or policy		Financial commitments
	2011	Service Framework for Cancer Prevention, Treatment and Care	Does not provide financial details on the implementation/delivery of the framework but notes that specific standards were associated with additional costs, “performance indicators and targets will be reviewed and adjusted as necessary” in light of budget for the period 2011/12 to 2013/14 [p. 45][234] Unclear whether this was achieved
Scotland	2000	Our National Health: A plan for action, a plan for change	Notes investments in equipment of £16m (time period unclear), with a further £30m allocation announced in July 2000 which is “in addition to a £13 million package of investment to replace ageing linear accelerator equipment”, and £8.4m to recruit 320 specialist staff (incl. 10 consultants), mostly for cancer services[264]
	2001	Cancer in Scotland: Action for Change	Accompanied by a series of ‘National implementation/investment’ plans by financial year, setting out detailed action points, planned/expected costs, milestones/target dates and named responsible lead by Regional Cancer Advisory Group, with a focus on strategic priorities, including[215]: -FY 2001/02: total investment calculated at £10.8m (£6.8m capital costs; £4m revenue costs; largely equipment and staffing) - FY 2002/03 total investment calculated at £11.7m (£2.3m capital, £9.4m, mostly staffing and some infrastructure) plus additional £2m for staffing the Beatson Oncology Centre in Glasgow unclear whether there were further plans for subsequent financial years[216] [217] 2005 Sustaining Change notes that the launch of the 2001 Cancer in Scotland strategy was “backed by an additional investment of £60 million” [p. 14] which was “initially ring fenced for 3 years” [p. 51][220]
	2004	Cancer in Scotland: Sustaining Change	Provides figures on financial investments in a range of areas but there is no summary overview of total investment; examples include[220]: - “£25m recurring investment, ring fenced until at least 2005-06” [p. 4] - investment of £33.1m on “replacement and additional radiotherapy equipment since 1997”, estimates that by 2005-06 there will be 24 LAs (~5 per million population) [p. 33] - £87 million for Phase II of the West of Scotland Cancer Centre (“the biggest ever public investment of this type in Scotland”) with work to commence in 2004 and opening expected in 2007 [p. 38] - announcement in 2002 of £1m to support development of Scottish Cancer Research Network [p. 47]
	2008	Better Cancer Care, An Action Plan	Does not provide details on the financing of the Plan 2016 Beating Cancer strategy refers to “substantial investment” that had been made to improve cancer treatment services, including[244]: - £11.5m to improve cancer services capacity in NHS Boards since 2011 [p. 32] - £22m invested in the Beatson West of Scotland Cancer Centre satellite radiotherapy facility at Monklands Hospital (opened November 2015) [p. 32] - £1m capital investment to support robotic surgery in Aberdeen in 2015 - £60m to update radiotherapy equipment over the period 2009/10-2014/15 [p. 35] - additional £5.25m for NHS Boards in 2015 to improve performance on cancer waiting times - increase in specialist oncology workforce by 44% for clinical radiologists since 2011
	2016	Beating cancer: Ambition and Action	Notes that there will be “at least £100 million of additional investment over 5 years” to implement the strategy [p. 4][244]; does not provide an overview of how the funding would be allocated, but 13 of the 53 actions have specific funding commitments attached: - prevention: £1m over 4 years for prevention around breast cancer (conditional) - screening: £5m over 5 years to reduce inequalities in screening - detection: £3m per year on diagnostics plus £500k for detecting cancer early programme for malignant melanoma - treatment: £52m over 5 years incl. for radiotherapy equipment (£39m), improving surgical treatment (£7.5m), advanced technologies (£2m) - workforce: £11m over 5 years for additional radiotherapy training & staff - living with cancer: £12.5 m over 4-5 years to improve access to services incl. palliative care - quality improvement: £2m over 2 years for the Innovative Healthcare Delivery Programme (IHDP) Further mentions: - additional £27m that had been “announced in February 2016 to train additional nurses and doctors” to ensure a ‘more sustainable workforce’ also incl. the cancer workforce [p. 42] - by 2021 there will be a “network of six new Diagnostic and Treatment Centres across Scotland” to speed up cancer diagnoses and ensure quick access to treatment [p. 29] although this ambition is not listed as an actual action
Wales			Financing information on cancer plan implementation is patchy, only a few reports mention financial commitments
	2006	Radiotherapy Equipment Needs and Workforce Implications 2006-2016	Update to 2020 of the 2006 Radiotherapy Report notes that the work was supported “by an approved all Wales Capital procurement programme that ended in 2012” [p. 12][265], along with revenue funding from the Health Boards, increasing staff and equipment to support service expansion incl. Las and CT simulators, among others; further notes targeted funding by the government from April 2009 to increase radiotherapy capacity through extended working hours but does not provide financial figures

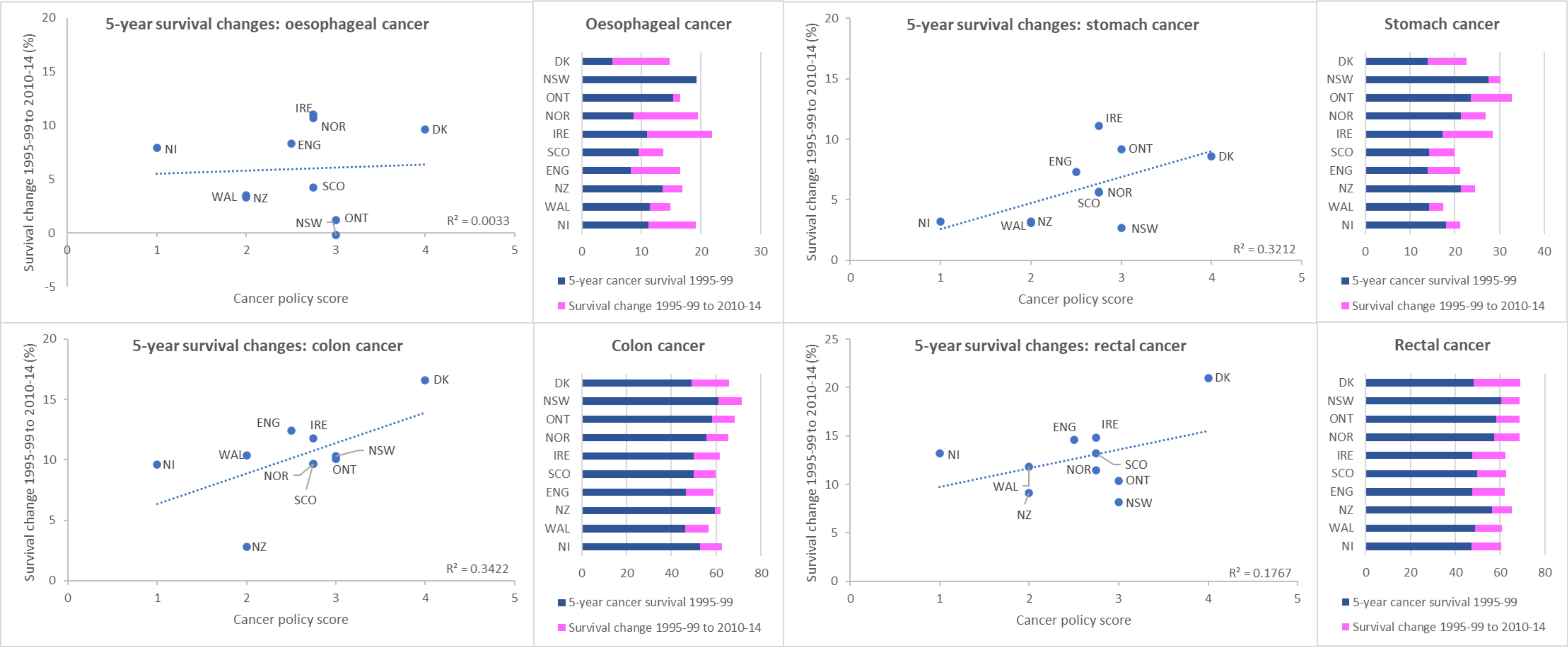
Jurisdiction	Plan or policy		Financial commitments
			By 2014, the number of linear accelerators had increased from 11 (2004/05) to 14; also, of the projected 6-10 new and 11 replacement LA, only 2 and 7 had been commissioned; update report projects that activity will more than double by 2020 equating to a need of a total of between 22 to 26 LA; further reports that while staffing had increased, concerns remained for medical physicists and radiographers
	2012	Together for Health: Cancer Delivery Plan for the NHS to 2016	Does not provide details on the financing of the Plan 2014 Inquiry by the Health and Social Care Committee notes that the government had invested an £4m to support Health Boards to achieve their targets in relation to diagnostics, with an additional £2.5m capital funding provided in 2014-15 to improve diagnostic services [p. 27][17] 2016 Annual Report on progress of the Delivery Plan notes that the Welsh Government had provided "nearly £10 million for replacement linear accelerators and is supporting the £200 million new Velindre Cancer Centre. £15 million has been allocated in the budget for better diagnostics" [p. 3][266] but the timeframe for this is unclear; also cites a Cancer Implementation Group (CIG) accountable to the chief executive of NHS Wales "for the overall coordination of the delivery plan implementation" [p. 17]; it is unclear when this group was established, notes that CIG had focused ensuring sustainable changes in cancer service delivery in the 'past 12 months' and that the Welsh government had allocated £1 million annually for the delivery of the priorities identified by the CIG since 2015/16.

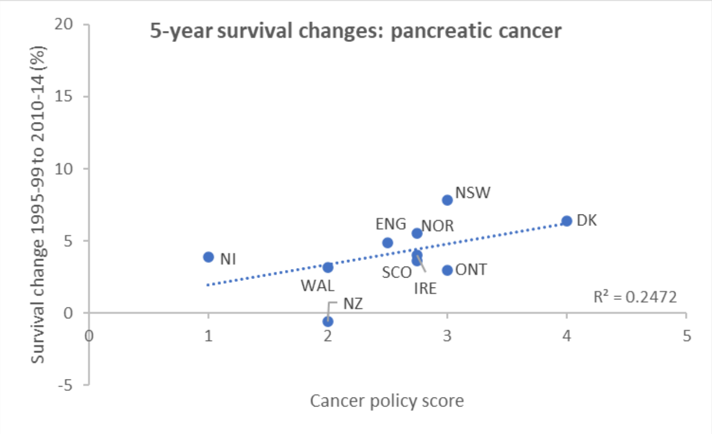
Supplement Table S.7. Scoring of cancer policies in ten jurisdictions

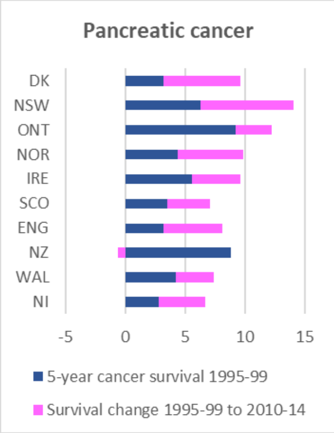
	Australia: New South Wales	Canada: Ontario	Denmark	Ireland	New Zealand	Norway	UK: England	UK: Northern Ireland	UK: Scotland	UK: Wales
Dedicated institute/ oversight function	**Consistent & dedicated oversight function:** NSW Cancer Institute oversees development & implementation of successive cancer plans	**Consistent & dedicated oversight function:** CCO oversees development & implementation of successive cancer plans	**Consistent & dedicated oversight function:** Cancer Steering Group, Cancer Treatment Taskforce & National Board of Health oversee development & implementation of cancer plan/strategy	**Consistent & dedicated oversight function:** NCCP set up to implement 2006 cancer plan and continues to oversee reorganisation of cancer services	**Consistent & dedicated oversight function (to 2015):** Cancer Control Council & subsequent Cancer Control NZ tasked overseeing cancer control (abolished in 2015)	**Oversight function with MoH:** National Cancer Plan Selection Committee established to develop 1997 cancer plan; implementation of this & subsequent plans/strategies overseen by MoH	**Dedicated oversight function until 2013:** National Cancer Director & Cancer Action Team tasked with developing & implementing 2000 and 2007 cancer plans; Cancer Action Team abolished in 2013	**Oversight function with different groups:** Regional Cancer Services Framework (Steering) group tasked with developing recommendations for cancer services; Northern Ireland Cancer Network (NICaN) to oversee service delivery improvement	**Consistent & dedicated oversight function:** Scottish Cancer Group (later: Scottish Cancer Taskforce) initially oversee delivery pf cancer plans & later take wider remit in cancer control in Scotland	**Consistent & dedicated oversight function:** Cancer Services Co-ordinating Group (CSCG) (later: All Wales Cancer Implementation Group) tasked with implementing 1996 cancer plan & wider remit thereafter
Score (no weighting applied)	**1**	**1**	**1**	**1**	**1**	**0.75**	**0.75**	**0.75**	**1**	**1**
Successive cancer plans that build on each other	Successive cancer plans 1-3 published in 2004, 2006 and 2010; supported by specific plans for radiotherapy	Successive cancer plans 1-3 published in 2004, 2008 and 2013; supported by specific plans for systemic therapy	Successive cancer plans 1-3 published in 2000, 2005 and 2010	Successive cancer plans 1 and 2 published in 1996 and 2006	2 (not linked) cancer plans published 2003 and 2014	3 cancer plans published, 2 of which linked (1997, 2006), 2013 plan not linked to earlier plans	3 cancer plans published, 2 of which linked (2000, 2007), 2011 plan not linked to earlier plans	1 cancer plan published (2007)	3 cancer plans published, 2 of which linked (2000, 2004), 2008 plan not linked to earlier plans	3 cancer plans published, not explicitly linked (1996, 2006, 2012)
Score	1	1	1	0.5	0.25	0.75	0.75	0.25	0.75	0.5
x1.25 for those with consistent planning over period	**1.25**	**1.25**	**1.25**	**0.5**	**0.25**	**0.75**	**0.75**	**0.25**	**0.75**	**0.5**
Cancer plan is accompanied by action/implementation plan	none published	none published	2011 Implementation Plan linked to Cancer Plan 3	none published	2006 Action Plan linked to 2003 cancer plan	1998 Action Plan linked to 1997 cancer plan; 2013 cancer plan followed by Action Plan (2015)	2000 Implementation Plan linked to 2000 Cancer Plan	none published	2001 Implementation Plan linked to 2001 Cancer Plan	none published
Score	0	0	0.25	0	0.5	0.75	0.25	0	0.25	0
x1.25 for any published action plan	**0**	**0**	**0.3125**	**0**	**0.625**	**0.9375**	**0.3125**	**0**	**0.3125**	**0**

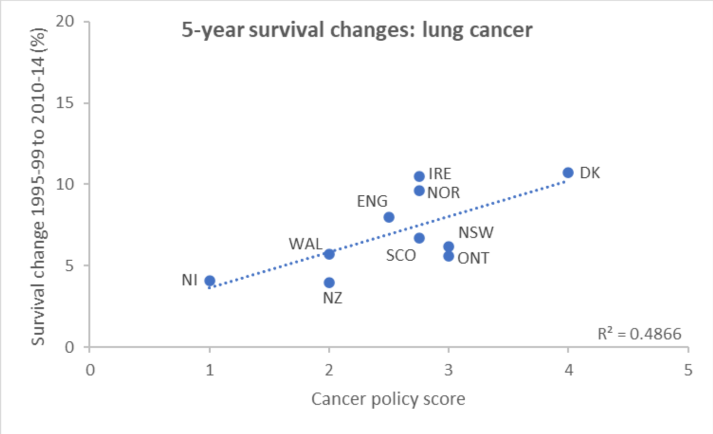
	Australia: New South Wales	**Canada: Ontario**	**Denmark**	**Ireland**	**New Zealand**	**Norway**	**UK: England**	**UK: Northern Ireland**	**UK: Scotland**	**UK: Wales**
Cancer plan includes explicit budget for implementation	Theme-specific cancer plans for RT (1995, 2003, 2010) have explicit budget	All 3 cancer plans include explicit budget	All 3 cancer plans include explicit budget	1996 cancer plan includes explicit budget HSE National Service Plan 2009/10 sets out detailed budget for 2006 cancer strategy	No	1998 cancer action plan includes explicit budget	2000 cancer plan includes explicit budget	No	2001 & 2004 cancer plans include explicit budget	no
Score (no weighting applied)	0.5	1	1	0.5	0	0.25	0.25	0	0.75	0
Cancer plan is regularly evaluated/progress report	2006 progress report on 2004 cancer plan Cancer Institute NSW Annual Reports document progress on cancer plan achievements	none published	Evaluations of 2000 and 2005 cancer plans	Evaluations of 1996 and 2006 cancer plans	2008 progress report on 2005 cancer action plan	Evaluation of 1997 cancer plan	2 progress reports on 2000 cancer plan (2003, 2005); 2010 progress report on 2007 cancer plan	none published	none published	2014 Inquiry on 2012 cancer plan
Score	0.5	0	0.75	0.75	0.25	0.25	0.5	0	0	0.5
x1.25 for evaluations rather than progress reports only	**0.5**	**0**	**0.9375**	**0.9375**	**0.25**	**0.3125**	**0.5**	**0**	**0**	**0.5**
Total score (including weightings)	**3.25**	**3.25**	**4.50**	**2.94**	**2.13**	**3.00**	**2.56**	**1.00**	**2.81**	**2.00**

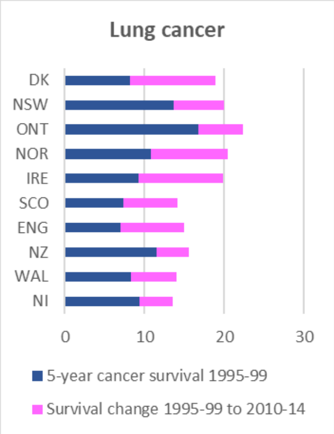
Supplement Figure S.2. Correlation between cancer policy consistency and survival from selected cancers in 10 jurisdictions (unweighted scores)

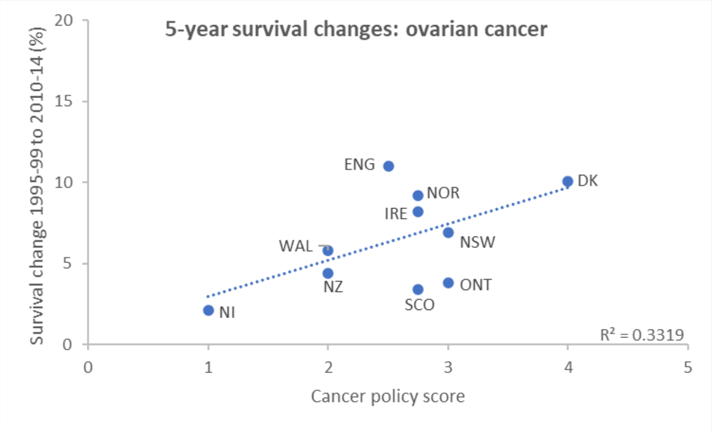


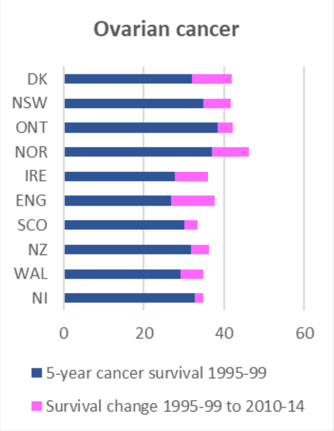

5-year survival changes: pancreatic cancer
Survival change 1995-99 to 2010-14 (%)
20
15
10
5
0
-5
0
1
2
3
4
5
Cancer policy score
NSW
ENG
NOR
DK
NI
WAL
SCO
ONT
IRE
NZ
R² = 0.2472


Pancreatic cancer
DK
NSW
ONT
NOR
IRE
SCO
ENG
NZ
WAL
NI
-5
0
5
10
15
5-year cancer survival 1995-99
Survival change 1995-99 to 2010-14


5-year survival changes: lung cancer
Survival change 1995-99 to 2010-14 (%)
20
15
10
5
0
0
1
2
3
4
5
Cancer policy score
IRE
NOR
DK
ENG
WAL
NSW
SCO
ONT
NI
NZ
R² = 0.4866


Lung cancer
DK
NSW
ONT
NOR
IRE
SCO
ENG
NZ
WAL
NI
0
10
20
30
5-year cancer survival 1995-99
Survival change 1995-99 to 2010-14


5-year survival changes: ovarian cancer
Survival change 1995-99 to 2010-14 (%)
20
15
10
5
0
0
1
2
3
4
5
Cancer policy score
ENG
DK
NOR
IRE
NSW
WAL
NZ
ONT
SCO
NI
R² = 0.3319


Ovarian cancer
DK
NSW
ONT
NOR
IRE
ENG
SCO
NZ
WAL
NI
0
20
40
60
5-year cancer survival 1995-99
Survival change 1995-99 to 2010-14

References

1. Australian Bureau of Statistics. 3218.0 - Regional Population Growth, Australia, 2017-18. URL: https://www.abs.gov.au/AUSSTATS/abs@.nsf/0/B7616AB91C66CDCFCA25827800183B7B?Opendocument (accessed 5 September 2021)..
2. Government of Newfoundland and Labrador. Population and demographics. URL: https://www.stats.gov.nl.ca/Statistics/Statistics.aspx?Topic=population (accessed 5 September 2021).
3. Office for National Statistics. Population estimates. URL: https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/datasets/populationestimatesforukenglandandwalesscotlandandnorthernireland (accessed 5 September 2021).
4. World Bank. Data. URL: https://data.worldbank.org/indicator/EN.POP.DNST (accessed 5 September 2021).
5. Australian Bureau of Statistics. Population density. URL: https://www.abs.gov.au/AUSSTATS/abs@.nsf/Previousproducts/3218.0Main%20Features702016-17?opendocument&tabname=Summary&prodno=3218.0&issue=2016-17&num=&view (accessed 5 September 2021).
6. Statistics Canada. Population and Dwelling Count Highlight Tables, 2016 Census. https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/hlt-fst/pd-pl/Table.cfm?Lang=Eng&T=101&S=50&O=A (accessed 5 September 2021).
7. Statistics Norway. Population. URL:https://www.ssb.no/en/statbank/table/11342/tableViewLayout1/ (accessed 5 September 2021).
8. Office for National Statistics. All data related to life expectancies. URL: https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/lifeexpectancies/datalist?size=50 (accessed 5 September 2021).
9. OECD.Stat. Welcome to OECD.Stat. 2020. URL: https://stats.oecd.org/ (accessed 5 September 2021).
10. The Commonwealth Fund. International Health Care Systems Profiles. 2020. URL: https://www.commonwealthfund.org/international-health-policy-center/countries (accessed 5 September 2021).
11. Marchildon G. Canada: Health system review. *Health Systems in Transition* 2013;15:1-179.
12. Cooke O'Dowd N, Kumpunen S, Holder H. Can people afford to pay for health care? New evidence on financial protection in the United Kingdom. Copenhagen: WHO Regional Office for Europe, 2018.
13. NHS Scotland. The Charter of Patient Rights and Responsibilities. Revised: June 2019. URL: https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2019/06/charter-patient-rights-responsibilities-2/documents/charter-patient-rights-responsibilities-revised-june-2019/charter-patient-rights-responsibilities-revised-june-2019/govscot%3Adocument/charter-patient-rights-responsibilities-revised-june-2019.pdf (accessed 5 September 2021).
14. HSC Health and Social Care online. HSC structure. URL: http://online.hscni.net/home/hsc-structure/ (accessed 5 September 2021).
15. NHS Wales. Structure. URL: http://www.wales.nhs.uk/nhswalesaboutus/structure (accessed 5 September 2021).
16. O'Kelly M, Teljour C, O'Kelly F, et al. Structure of General Practice in Ireland1982 — 2015. Dublin: Trinity College Centre for Health Science, 2016.
17. Health and Social Care Committee. Inquiry into progress made to date on implementing the Welsh Government's Cancer Delivery Plan. Cardiff: National Assembly for Wales, 2014.
18. Morgan G, Barton M, Crossing S, et al. A 'Catch Up' Plan for radiotherapy in New South Wales to 2012. *J Med Imaging Radiat Oncol* 2012;53:419-30.
19. Barton M, Delaney G. A decade of investment in radiotherapy in New South Wales: why does the gap between optimal and actual persist? . *J Med Imaging Radiat Oncol* 2011;55:433-41.
20. Australian Institute of Health and Welfare. Priority Areas Report. Cancer control. Canberra: Canberra: Commonwealth of Australia, 1997.
21. Elwood J, Burton R, Quinn M. The success and unrealised potential of the National Cancer Control Initiative. *MJA* 2006;185:183-4.
22. Anderiesz C, Elwood M, Hill D. Cancer control policy in Australia. *Aust NZ Health Policy* 2006;3:12.
23. ACIL Consulting PTY Ltd. Review of radiotherapy services Victoria. A report to Department of Human Services, Vctoria. Sydney: Sydney: ACIL Consulting, 1998.
24. Radiation Oncology Tripartite Committee. Planning for the Best: Tripartite National Strategic Plan for Radiation Oncology 2012-2022, version 1. Sydney: The Royal Australian and New Zealand College of Radiologists, 2012.

25. Barton M, Peters L, Kenny L. Radiotherapy in Australia one year after the Baume report: vision or mirage? *MJA* 2004;180:55-6.
26. The Department of Health. Radiation Oncology Inquiry. 2016. URL: https://www1.health.gov.au/internet/main/publishing.nsf/Content/health-roi-inquiry-report.htm (accessed 5 September 2021).
27. National Cancer Control Initiative. Optimising Cancer Care in Australia. Melbourne: National Cancer Control Initiative, 2003.
28. Cancer Institute NSW. NSW Cancer Plan 2004-2006. Eveleigh: The Cancer Institute NSW, 2004.
29. Victoria State Government. Cancer care. 2017-2020. URL: https://www2.health.vic.gov.au/about/health-strategies/cancer-care (accessed 5 September 2021).
30. Health Reform Committee. A healthy future for Western Australians. Perth: Western Australian Department of Health, 2004.
31. The Department of Health. Radiation Oncology Reform Implementation Committee (RORIC) Meeting, 26 March 2013. URL: https://www1.health.gov.au/internet/main/publishing.nsf/Content/roric-commun (accessed 5 September 2021).
32. Cancer Council NSW. Budget Initiatives for Cancer Control. NSW State Budget 2009/2010. URL: https://www.cancercouncil.com.au/wp-content/uploads/2010/11/NSW-Pre-Budget-submission_2009_10.pdf (accessed 5 September 2021).
33. Ministerial Taskforce for Cancer. Towards better care for all cancer patients in Victoria. Melbourne: Victorian Government Department of Human Services, 2005.
34. NSW Government. Cancer Institute (NSW) Act 2003 No 14. URL: https://legislation.nsw.gov.au/#/view/act/2003/14/part2 (accessed 5 September 2021).
35. Cancer Institute NSW. NSW Cancer Plan 2004-2006. Lessening the Impact of Cancer. A Two Year Progress Report. URL: https://www.cancer.nsw.gov.au/getattachment/65e401d6-c948-4179-804c-58f99074dbf4/2004-2006_cancer_plan_two_year_progress_report.pdf (accessed 5 September 2021).
36. National Health Priority Action Council. National Service Improvement Framework for Cancer. 2004. URL: https://www.cosa.org.au/media/1069/cosa_report_national-service-improvement-framework_2004.pdf (accessed 5 September 2021).
37. Cancer Institute NSW. NSW Oncology Group: successes and opportunities. 2009. URL: https://www.cancer.nsw.gov.au/about-us/news/nsw-oncology-group-successes-and-opportunities (accessed 5 September 2021).
38. Department of Health. WA Health Cancer Services Framework. Perth: Department of Health, 2005.
39. Department of Health. Western Australia Cancer Plan 2012–2017. Perth: WA Cancer & Palliative Care Network, Department of Health, 2011.
40. Parliament of Australia. Bills Digest no. 103 2005 06 - Cancer Australia Bill 2006. URL: https://www.aph.gov.au/Parliamentary_Business/Bills_Legislation/bd/bd0506/06bd103 (accessed 5 September 2021).
41. Victorian Cancer Agency. About VCA. URL: https://www.victoriancanceragency.vic.gov.au/about-vca (accessed 5 September 2021).
42. Cancer Institute NSW. NSW Cancer Plan 2007-2010. Accelerating the Control of Cancer. Alexandria: Cancer Institute NSW, 2006.
43. Department of Health and Ageing. Radiation Oncology Workforce Planning. Final Report: Sydney, 2009.
44. Victorian Government Department of Human Services. Victoria’s Cancer Action Plan 2008-2011. Melbourne: Victorian Government Department of Human Services, 2008.
45. Australian Government. Delivering Better Cancer Care. 2010. URL: https://www1.health.gov.au/internet/publications/publishing.nsf/Content/cancer-policy-booklet/$FILE/cancare.pdf (accessed 5 September 2021).
46. NSW Government. NSW Cancer Plan 2011-2015: Lessening the impact of cancer in NSW. Alexandria: Cancer Institute NSW, 2010.
47. Victoria State Government. Victorian cancer plan 2016–2020. Improving cancer outcomes for all Victorians. Melbourne: Department of Health and Human Services, 2016.
48. NSW Department of Health. Radiotherapy Services in NSW Strategic Plan to 2016. Sydney: NSW Department of Health, 2010.
49. The Department of Health. National action - cancer control. URL: https://www1.health.gov.au/internet/main/publishing.nsf/Content/cancer-national. 2018

50. The Department of Health. RORIC Workforce Reform Framework. 2011. URL: https://www1.health.gov.au/internet/publications/publishing.nsf/Content/RORICworkforcereformframework-lp (accessed 5 September 2021).
51. COAG. COAG Improving Cancer Care Initiative:National Cancer Work Plan. 2012. URL: https://www1.health.gov.au/internet/main/publishing.nsf/Content/9ADA98F27F90251BCA257DC7007763D3/$File/Att%201%20-%20Impr%20Cancer%20Care.pdf (accessed 5 September 2021).
52. COAG. COAG National Cancer Work PlanProgress Report 2013-14. URL: https://www1.health.gov.au/internet/main/publishing.nsf/Content/9ADA98F27F90251BCA257DC7007763D3/$File/Attachment%203%20-%202013-14%20Progress%20Report.pdf (accessed 5 September 2021).
53. Cancer Institute NSW. Aboriginal Cancer Partnership Project. 2019. URL: https://www.cancer.nsw.gov.au/how-we-help/programs-we-support/aboriginal-cancer-partnership-project (accessed 5 September 2021).
54. Health Workforce Australia. National Cancer Workforce Strategic Framework. .Adelaide: HWA, 2013.
55. NSW Ministry of Health. NSW state health plan towards 2021. 2014. URL: https://www.health.nsw.gov.au/statehealthplan/Publications/NSW-state-health-plan-towards-2021.pdf (accessed 5 September 2021).
56. Victoria State Government. Summary of Improving Cancer Outcomes Act 2014. URL: https://www2.health.vic.gov.au/about/publications/policiesandguidelines/summary-of-improving-cancer-outcomes-act-2014 (accessed 5 September 2021).
57. Victorian Legislation. Improving Cancer Outcomes Act 2014. URL: https://www.legislation.vic.gov.au/in-force/acts/improving-cancer-outcomes-act-2014/002 (accessed 5 September 2021).
58. COAG. National Cancer Work Plan Optimal Cancer Care Pathways Pilot Implementation 2016-17 – National Summary. URL: https://www1.health.gov.au/internet/main/publishing.nsf/Content/9ADA98F27F90251BCA257DC7007763D3/$File/NCERG%20OCP%20Implementation%202016-17%20National%20Summary%20website%20edit.pdf (accessed 5 September 2021).
59. Government of Western Australia. Minister recommends changes to cancer services. Media Statements. 19/11/2015. URL: https://www.mediastatements.wa.gov.au/Pages/Barnett/2015/11/Minister-recommends-changes-to-cancer-service.aspx (accessed 5 September 2021).
60. Parliament of Western Australia. Parliamentary Questions. Question Without Notice No. 666 asked in the Legislative Assembly on 8 September 2015 by Mr R.H. Cook. URL: https://www.parliament.wa.gov.au/parliament/pquest.nsf/3f9c0f35f2b504544825718e001105c9/10cc22007c06e04c48257ebd000c3dec?OpenDocument (accessed 5 September 2021).
61. Department of Health. WA Cancer Care Taskfore. Department of Health – Program Implementation Plan 2015. URL: https://ww2.health.wa.gov.au/Reports-and-publications/WA-Cancer-Taskforce-Program-Implementation-Plan-2015 (accessed 5 September 2021).
62. NSW Government. NSW Cancer Plan. A statewide plan for lessening the impact of cancers in NSW. Alexandria: Cancer Institute NSW, 2016.
63. Victorian Health and Human Services Building Authority. Victorian Comprehensive Cancer Centre. URL: https://www.vhhsba.vic.gov.au/health/specialist-centres/victorian-comprehensive-cancer-centre (accessed 5 September 2021).
64. Cancer Australia. National Cancer Control Indicators (NCCI). URL: https://canceraustralia.gov.au/research-data/data/national-cancer-data-strategy (accessed 5 September 2021).
65. NSW Government, Cancer Institute NSW. NSW Cancer Plan 2011-2015. Evaluation synopsis. Alexandria: Cancer Institute NSW, 2017.
66. New Brunswick Cancer Network (NBCN). Cancer control accountability framework. 2003. URL: http://leg-horizon.gnb.ca/e-repository/monographs/30000000043897/30000000043897.pdf (accessed 5 September 2021).
67. Charity Intelligence Canada. CancerCare Manitoba Foundation. 2020. URL: https://www.charityintelligence.ca/charity-details/469-cancercare-manitoba-foundation (accessed 5 September 2021).
68. CancerCare Manitoba Foundation. About CancerCare Manitoba Foundation. URL: https://www.cancercarefdn.mb.ca/about-ccmf/ (accessed 5 September 2021).
69. CSCC Governing Council. The Canadian Strategy for Cancer Control: A Cancer Plan for Canada. 2006. URL: https://www.partnershipagainstcancer.ca/wp-content/uploads/2015/03/The-Canadian-Strategy-for-Cancer-Control-A-Cancer-Plan-for-Canada_accessible.pdf (accessed 5 September 2021).
70. Anon. Five Key Priorities of the Canadian Strategy For Cancer Control. *J Nat Cancer Inst* 2001;93:1197.

71. CanLII. Cancer Treatment and Prevention Amendment Act, 1982, SA 1982. URL: https://www.canlii.org/en/ab/laws/astat/sa-1982-c-10/latest/sa-1982-c-10.html (accessed 5 September 2021).
72. CAPCA. About us. URL: https://capca.ca/about-capca/who-we-are/ (accessed 5 September 2021).
73. Manitoba Government. The CancerCare Manitoba Act. 2001. URL: https://web2.gov.mb.ca/laws/statutes/ccsm/_pdf.php?cap=c20 (accessed 5 September 2021).
74. CancerCare Manitoba. Welcome to CancerCare Manitoba. URL: https://www.cancercare.mb.ca/home/ (accessed 5 September 2021).
75. Caron L, De Civita M, Law M, et al. Cancer Control Interventions in Selected Jurisdictions: Design, Governance, and Implementation. Montreal: Agence d’évaluation des technologies et des modes d’intervention en santé, 2008.
76. Sisler J. Bridging the gap between primary care and the cancer system. The UPCON Network of CancerCare Manitoba. *Can Fam Physician* 2009;55:273-8.
77. Postl B. Final Report of the Federal Advisor on Wait Times. 2006. URL: https://www.canada.ca/en/health-canada/services/health-care-system/reports-publications/health-care-system/final-report-federal-advisor-wait-times.html (accessed 5 September 2021).
78. Government of Canada. Patient wait times guarantees. 2012. URL: https://www.canada.ca/en/health-canada/services/quality-care/wait-times/patient-wait-times-guarantees.html (accessed 5 September 2021).
79. New Brunswick Cancer Network. Cancer system performance 2012. 2014. URL: https://www2.gnb.ca/content/dam/gnb/Departments/h-s/pdf/en/Cancer/CancerSystemPerformance2012.pdf (accessed 5 September 2021).
80. Canadian Partnership against Cancer. Home. URL: https://www.partnershipagainstcancer.ca/# (accessed 5 September 2021).
81. Fairclough L, Hill J, Bryant H, et al. Accelerating Knowledge to Action: The pan-Canadian Cancer Control Strategy. *Curr Oncol* 2012;19:70-7.
82. Government of Manitoba. Cancer services in Manitoba. A strategic framework. 2007. URL: https://www.gov.mb.ca/health/documents/cancer.pdf (accessed 5 September 2021).
83. Lorne Tyrrell D, Palmer R. Alberta Health Services and Health Research Report. 2009. URL: http://www.assembly.ab.ca/lao/library/egovdocs/2009/alahs/155305.pdf (accessed 5 September 2021).
84. Government of Alberta. Budget 2008. The Right Plan for Today & Tomorrow. URL: https://open.alberta.ca/dataset/c48d754f-9e69-4ab2-83b2-df8c160eb71d/resource/c638c193-7243-4de3-8cf6-ef5d5e65eae1/download/fiscal-plan-complete.pdf (accessed 5 September 2021).
85. Canadian Partnership against Cancer. The System Performance Initiative A First Year Report. Toronto: Canadian Partnership against Cancer, 2009.
86. Government of Newfoundland and Labrador. Commission of Inquiry on Hormone Receptor Testing. St John’s: Government of Newfoundland and Labrador, 2009.
87. Canadian Agency for Drugs and Technologies in Health. CADTH pan-Canadian Oncology Drug Review. 2020. URL: https://cadth.ca/pcodr (accessed 5 September 2021).
88. Department of Health and Community Services. Gaining Ground. A Provincial Cancer Control Policy Framework for Newfoundland and Labrador. St. John’s: Department of Health and Community Services, 2010.
89. Canadian Partnership for Quality Radiotherapy. About the CPQR. 2018. URL: http://www.cpqr.ca/ (accessed 5 September 2021).
90. Canadian Partnership against Cancer. First Nations, Inuit and Metis Action Plan on Cancer Control. 2011. URL: https://www.partnershipagainstcancer.ca/wp-content/uploads/2017/12/fnim-action-plan-cancer-control.pdf (accessed 5 September 2021).
91. CancerCare Manitoba. Tomorrow starts today. CancerCare Manitoba 2010/2011 Progress Report. URL: https://www.cancercare.mb.ca/export/sites/default/About-Us/.galleries/files/corporate-publications/CCMB_Progress_Report_2010-2011.pdf (accessed 5 September 2021).
92. Government of Newfoundland and Labrador. Minister Provides Update on Cancer Control Policy Framework. News Release. 19 March 2015. URL: https://www.releases.gov.nl.ca/releases/2015/health/0319n03.aspx (accessed 5 September 2021).
93. Government of Manitoba. Manitoba's cancer strategy 2012-2017. URL: https://www.gov.mb.ca/health/documents/mbcancer_strategy.pdf (accessed 5 September 2021).
94. Canadian Partnership against Cancer. Sustaining Action Toward a Shared Vision. 2012–2017 Strategic Plan. Toronto: Canadian Partnership against Cancer, 2016.

95. Alberta Health Services. Alberta Health Services: Strategic Clinical Networks. A primer and working document (August 7, 2012 - V5). URL: https://www.albertahealthservices.ca/assets/about/scn/ahs-scn-primer.pdf (accessed 5 September 2021).
96. Alberta Health. Changing Our Future: Alberta's Cancer Plan to 2030. Edmonton: Government of Alberta, 2013.
97. New Brunswick Cancer Network. Cancer system performance 2019. Fredericton: Government of New Brunswick, 2019.
98. CancerCare Manitoba. Delivering excellence. 2016-2021 Manitoba Cancer Plan. Winnipeg: CancerCare Manitoba, 2016.
99. Canadian Partnership against Cancer. The Canadian Strategy for Cancer Control: 2017–2022. Toronto: Canadian Partnership against Cancer, 2016.
100. Canadian Partnership against Cancer. 2019-2029 Canadian Strategy for Cancer Control. 2019. URL: https://s22457.pcdn.co/wp-content/uploads/2019/06/Canadian-Strategy-Cancer-Control-2019-2029-EN.pdf (accessed 5 September 2021).
101. Alberta Health Services. Terms of Reference. Cancer Provincial Advisory Committee. 2016. URL: https://www.albertahealthservices.ca/assets/about/ac/ahs-pac-cancer-tor.pdf (accessed 5 September 2021).
102. Cancer Provincial Advisory Council. 2018-19 Annual Report. URL: https://www.albertahealthservices.ca/assets/about/ac/ahs-pac-cancer-2018-2019-ar.pdf (accessed 5 September 2021).
103. Cancer Care Ontario. CCO Health. 75 years of transformation. 2017. URL: https://www.ccohealth.ca/en/historical-timeline (accessed 5 September 2021).
104. Nova Scotia House of Assembly. Queen Elizabeth II Health Sciences Centre Act. 2000. URL: https://nslegislature.ca/sites/default/files/legc/statutes/queen.htm (accessed 5 September 2021).
105. Cancer Care Nova Scotia. Policy and Procedure Manual.2007. URL: https://dalspace.library.dal.ca/bitstream/handle/10222/14811/ZwaagstraAppendix.pdf?sequence=2&isAllowed=y (accessed 5 September 2021).
106. Prince Edward Island Cancer Control Strategy Advisory Committee. Partners Taking Action: A Cancer Control Strategy for Prince Edward Island 2004-2015. Charlottetown: Canadian Cancer Society Prince Edward Island division, Prince Edward Island Department of Health and Social Services, 2004.
107. Hudson A. Report of the Cancer Services Implementation Committee. 2001. URL: https://collections.ola.org/mon/3000/10301298.pdf (accessed 5 September 2021).
108. Cancer Quality Council of Ontario. About CQCO. URL: https://www.cqco.ca/en/about-us (accessed 5 September 2021).
109. Ehman A. Saskatchewan's new system tracks surgical waits. *CMAJ* 2004;170:1526.
110. Cancer Care Ontario. Targeting Cancer: An action plan for cancer prevention and detection (Cancer 2020). 2003. URL: https://collections.ola.org/ser/234736/2003/2003v01no03.pdf (accessed 5 September 2021).
111. Cancer Quality Council of Ontario. Strengthening the Quality of Cancer Services in Ontario. Synopsis. 2003. URL: https://collections.ola.org/mon/7000/10316089.pdf (accessed 5 September 2021).
112. Schwartz F, Evans W, Sullivan T, et al. Gaining Access to Appropriate Cancer Services: A Four-Point Strategy to Reduce Waiting Times in Ontario. Toronto: Cancer Quality Council of Ontario, 2004.
113. Cancer Care Ontario. Cancer Care Ontario. Ontario Cancer Plan 2005-2008. Toronto: Cancer Care Ontario, 2005.
114. Cancer Care Ontario. Regional Cancer Programs. URL: https://www.cancercareontario.ca/en/cancer-care-ontario/programs/regional-cancer-programs. 2020
115. Cancer Care Ontario. Ontario Cancer Plan 2011-2015. Toronto: Cancer Care Ontario, 2011.
116. Cancer Care Ontario. Ontario Cancer Plan 2008-2011. Toronto: Cancer Care Ontario, 2008.
117. CanlII. The Cancer Agency Act, SS 2006, c C-1.1l. URL: https://www.canlii.org/en/sk/laws/astat/ss-2006-c-c-1.1/138428/ss-2006-c-c-1.1.html (accessed 5 September 2021).
118. Corpus Sanchez International Consultancy. Changing Nova Scotia's healthcare system: creating sustainability through transformation. System-level findings and overall directions for change from the provincial health services operational review (PHSOR). 2007. URL: https://novascotia.ca/dhw/publications/Provincial_Health_Services_Operational_Review_Report.pdf (accessed 5 September 2021).
119. Cancer Care Ontario. Quality Person-Centred Systemic Treatment in Ontario 2014-2019. Systemic treatment provincial plan. Toronto: Cancer Care Ontario, 2014.

120. The PEI Cancer Control Strategy Committee. Partners making progress: A report on Prince Edward Island's Cancer Control Strategy 2004-2008. Charlottetown: Canadian Cancer Society PEI division, Prince Edward Island Department of Health and Social Services, 2004.
121. Urquhart R. Multi-level factors influence the implementation and use of complex innovations in cancer care: a multiple case study of synoptic reporting in Nova Scotia. PhD thesis submitted to Dalhousie University. 2013. URL: https://dalspace.library.dal.ca/bitstream/handle/10222/21420/Urquhart-Robin-PhD-IDPhD-March-2013.pdf?sequence=3&isAllowed=y (accessed 5 September 2021).
122. Health PEI. PEI Cancer Strategy 2016-2019: Charlottetown, 2016.
123. Direction de la lutte contre le cancer (DLCC). Mécanisme central de gestion de l'accès aux services de radio-oncologie. Cadre de reference. Québec: Ministère de la Santé et des Services sociaux, 2010.
124. Direction québécoise du cancer. Bilan des réalisations des Orientations prioritaires 2007-2012 du Programme québécois de lutte contre le cancer. Quebec: Ministère de la Santé et des Services sociaux, 2011.
125. Saskatchewan Cancer Agency. Strategic Plan 2011-2014. URL: https://www.iccp-portal.org/system/files/plans/Beyond%20the%20Horizon%20Strategic%20Plan%202011-2014.pdf (accessed 5 September 2021).
126. Cancer Care Ontario. Aboriginal Cancer Strategy II. Toronto: Cancer Care Ontario, 2012.
127. Cancer Care Ontario. Aboriginal Cancer Strategy III 2015-2019. Toronto: Cancer Care Ontario, 2015.
128. Direction québécoise de cancérologie, Ministère de la Santé et des Services sociaux. Plan directeur en cancérologie. Québec: Ministère de la Santé et des Services sociaux, 2013.
129. Direction québécoise de cancérologie. Mécanisme central de gestion de l'accès à la chirurgie oncologique. Cadre de reference. Québec: Ministère de la Santé et des Services sociaux, 2012.
130. Direction québécoise de cancérologie, Ministère de la Santé et des Services sociaux. Plan d'action en cancérologie 2013-2015. Québec. Ministère de la Santé et des Services sociaux, 2013.
131. Direction Générale de Cancérologie. Rapport du comité consultatif sur la démarche d'amélioration et de maintien de la performance du Programme national de cancérologie. Quebec: Ministère de la Santé et des Services sociaux, 2016.
132. Cancer Care Ontario. Navigating the Diagnostic Phase of Cancer: Ontario's Strategic Directions 2014-2018. Toronto: Cancer Care Ontario, 2014.
133. Cancer Care Ontario. Ontario Cancer Plan 2015-2019. Toronto: Cancer Care Ontario, 2015.
134. Saskatchewan Cancer Agency. 2015-2020 Strategic Plan. https://www.iccp-portal.org/system/files/plans/Canada_Saskatchewan_Strategic%20Plan%202015-2020.pdf (accessed 5 September 2021).
135. Fierlbeck K. Nova Scotia. A health system profile. Toronto: University of Toronto Press, 2018.
136. Direction générale de cancérologie. Plan d'action 2016-2017 de la Direction générale de cancérologie. Québec: Ministère de la Santé et des Services sociaux, 2016.
137. Health PEI. PEI Cancer Strategy Annual Progress Report 2016-2017. Charlottetown: Health PEI, 2016.
138. Ministry of Health. Cancer control services in New Zealand. Developing a national implementation strategy. 1995. URL: https://www.moh.govt.nz/notebook/nbbooks.nsf/0/8037A236872A4B554C2565D7000E2378/$file/Cancer-Control-1995.pdf (accessed 5 September 2021).
139. Department of Health and Children. Cancer Services in Ireland: A National Strategy. Dublin, 1996.
140. Sosial- og helsedepartementet. Omsorg og kunnskap! Norsk kreftplan. Rapport fra et utvalg for utredning av nasjonal kreftplan. Oslo: Sosial- og helsedepartementet, 1997.
141. Deloitte. An Evaluation of "Cancer Services in Ireland: A National Strategy 1996". On Behalf of the National Cancer Forum. 2003. URL: https://www.lenus.ie/bitstream/handle/10147/46408/1332.pdf?sequence=1 (accessed 5 September 2021).
142. Sundhedsstyrelsen. National kræftplan. Status og forslag til initiativer i relation til kræftbehandlingen. København: Sundhedsstyrelsen, 2000.
143. Helse- og omsorgsdepartementet. Om Nasjonal kreftplan og plan for utstyrsinvesteringer ved norske sykehus. St.prp. nr. 61 (1997-98). 1998. URL: https://www.regjeringen.no/no/dokumenter/stprp-nr-61-1997-98-/id201900/ (accessed 5 September 2021).
144. Sundhedsstyrelsen. National kræftplan. Synopsis og Delrapport 1. Strålebehandling. København: Sundhedsstyrelsen, 1999.
145. Johnston P, Daly P. The NCI-Ireland Consortium: A unique international partnership in cancer care. *The Oncologist* 2001;6:453-8.

146. Lewison G, Gavin A, McCallion K, et al. The 'Good Friday Agreement' and cancer research on the island of Ireland: Evidence for the impact of a tripartite cancer research partnership. *European journal of cancer* 2020;129:15-22.
147. Gavin J, Marshall B, Cox B. Progress towards a New Zealand Cancer Control Strategy. . Auckland: New Zealand Cancer Control Trust, 2001.
148. Department of Health. Cancer Services in Ireland: A National Strategy. Dubline: Department of Health, 1996.
149. National Cancer Forum. A Strategy for Cancer Control in Ireland. Dublin: Department of Health and Children, 2006.
150. Expert Working Group on Radiation Oncology. The Development of Radiation Oncology Services in Ireland. 2003. URL: https://www.hse.ie/eng/services/list/5/cancer/pubs/reports/development-of-radiation-oncology-in-ireland.pdf (accessed 5 September 2021).
151. Ministry of Health. Improving Non-Surgical Cancer Treatment Services in New Zealand. Wellington: Ministry of Health, 2001.
152. New Zealand Cancer Control Trust. Home. URL: http://www.cancercontrol.org.nz/ (accessed 5 September 2021).
153. Minister of Health. The New Zealand Cancer Control Strategy. Wellington: Ministry of Health and the New Zealand Cancer Control Trust, 2003.
154. Sundhedsstyrelsen. PET (Positron Emissionstomografi). Anbefalinger for udbygning af PET og FDG (flourodeoxyglukose) produktion. København: Sundhedsstyrelsen, 2006.
155. Sundhedsstyrelsen. Evaluering af kræftplanens gennemførelse – Status og fremtidig monitorering. København:: Sundhedsstyrelsen, 2004.
156. Ministry of Health and Care Services. National Cancer Strategy 2006-2009. URL: https://www.regjeringen.no/globalassets/upload/kilde/hod/anb/2006/0020/ddd/pdfv/296675-kreftstrategien_eng_25102006_kjb.pdf (accessed 5 September 2021).
157. Danske Multidisciplinære Cancer Grupper. Home. 2020. URL: https://www.dmcg.dk/ (accessed 5 September 2021).
158. Helsedepartementet. Nasjonal strategi for arbeid innenfor kreftomsorgen. Kvalitet, kompetanse og kapasitet. 2004. URL: https://ww+S5w.regjeringen.no/globalassets/upload/kilde/hd/rap/2004/0010/ddd/pdfv/220645-kreftstrategi_endelig_dokument.pdf (accessed 5 September 2021).
159. The National Board of Health. National Cancer Plan II Denmark. National Board of Health recommendations for improving cancer healthcare services. Copenhagen: The National Board of Health, 2005.
160. National Cancer Control Programme. Report on the implementation of 'A Strategy for Cancer Control in Ireland 2006'. Dublin: National Cancer Control Programme, 2014.
161. Department of Health. National Cancer Strategy 2017-2026. Dublin: Department of Health, 2017.
162. Cancer Control Taskforce. The New Zealand Cancer Control Strategy: Action Plan 2005–2010. Wellington: Ministry of Health, 2005.
163. Cancer Control Council of New Zealand. Summary - Mapping Progress: The first two years of the Cancer Control Strategy Action Plan 2005–2010. Wellington: Cancer Control Council of New Zealand, 2007.
164. Sundhedsstyrelsen. Bilag til Kræftplan II. 9.4 Eksperimentel behandling. 2005. URL: https://www.sst.dk/-/media/Udgivelser/2005/Publ2005/PLAN/kraeftplan2/Bilag/Bilag_9_4_Eksperimentel_behandling,-d-,pdf.ashx (accessed 5 September 2021).
165. Kræftens Bekæmpelse. Behandling på eksperimentelle enheder. 2019. URL: https://www.cancer.dk/hjaelp-viden/kraeftbehandling/forsoegsbehandling/eksperimentel-behandling/behandling-pa-eksperimentelle-enheder/ (accessed 5 September 2021).
166. Cancer Control Council of New Zealand. Mapping Progress II: Phase 1 of the Cancer Control Strategy Action Plan 2005–2010 Wellington: Cancer Control Council of New Zealand, 2008.
167. Sundhedsstyrelsen. Opfølgning på Kræftplan II. København: Sundhedsstyrelsen, 2007.
168. Warde P, de Koning H, Richardson A. National Cancer Strategy 2006: a Strategy for Cancer Control in Ireland. Evaluation Panel Report. 2014. URL: https://www.drugsandalcohol.ie/23983/1/Final-Evaluation-Panel-Report-of-National-Cancer-Strategy-2006.pdf (accessed 5 September 2021).
169. Ministry of Health. National Cancer Programme. 2020. URL: https://www.health.govt.nz/our-work/diseases-and-conditions/national-cancer-programme (accessed 5 September 2021).
170. Herbert RP, K. Regional Cancer Networks Evaluation Report. Wellington: Cancer Control New Zealand, 2010.

171. Norwegian Ministry of Health and Care Services. Together – against cancer. National Cancer Strategy 2013–2017. URL: https://www.regjeringen.no/contentassets/07cd14ff763444a3997de1570b85fad1/i-1158_together-against_cancer_web.pdf (accessed 5 September 2021).
172. Health Service Executive. Cancer services. 2018. URL: https://www.hse.ie/eng/services/list/5/cancer/ (accessed 5 September 2021).
173. Health Service Executive. National Service Plan 2009. Cork: Health Service Executive, 2008.
174. Health Service Executive. National Service Plan 2010. Dublin: Health Service Executive, 2010.
175. Christiansen T, Vrangbaek K. Hospital centralization and performance in Denmark - Ten years on. *Health policy* 2018;22:321-8.
176. Ministry of Health. Cancer Control Workforce Stocktake and Needs Assessment. Wellington: Ministry of Health.
177. Probst H, Hussain Z, Andersen O. Cancer patient pathways in Denmark as joint effort between bureaucrats, health proferssionals and politicans - A national Danish project. *Health policy* 2012;105:65-70.
178. Jensen H, Torring M, Vedsted P. Prognostic consequences of implementing cancer patient pathways in Denmark: a comparative cohort study of symptomatic cancer patients in primary care. *BMC cancer* 2017;17
179. Sundhedsstyrelsen. Styrket indsats på kræftområdet – et sundhedsfagligt oplæg. København: Sundhedsstyrelsen, 2010.
180. Sundhedsstyrelsen. Aftale om Kræftplan III. 2010. URL: https://www.sst.dk/da/Viden/Kraeft/Kraeftplaner/Kraeftplan-III (accessed 5 September 2021).
181. Nilssen Y, Brustugun O, Tandberg Eriksen M, et al. Decreasing waiting time for treatment before and during implementation of cancer patient pathways in Norway. *Cancer Epidemiol* 2019;61:59-69.
182. Helsedirektoratet. Implementering av pakkeforløp for kreft Nasjonal plan for implementering av pakkeforløp for kreft 2014-2015. Oslo: Helsedirektoratet, 2015.
183. Sundhedsstyrelsen. Implementeringsplan for de reviderede pakkeforløb for kræft. 2012. URL: https://www.sst.dk/-/media/Viden/Kraeft/Kr%C3%A6ftplaner/Kr%C3%A6ftplan-III/Implementeringsplan-for-de-reviderede-pakkeforloeb-for-kraeft.ashx?la=da&hash=E6962FE7AFCF2CF9EDAD671F046D86D10A618CB4 (accessed 5 September 2021).
184. Minister of Health. Health Targets: Moving towards healthier futures2007/08. Wellington: Ministry of Health, 2007.
185. Ministry of Health. Medical Oncology National Implementation Plan 2012/13. Wellington: Ministry of Health, 2012.
186. National Cancer Control Programme, HSE Office of Nursing and Midwifery Director. Strategy and Educational Framework for Nurses Caring for People with Cancer in Ireland. Dublin: National Cancer Control Programm, 2012.
187. National Cancer Control Programme. NCCP Oncology medication safety review report. Dublin: NCCP, 2014.
188. National Cancer Control Programme. NCCP Oncology Medication Safety Review Phase 1 Action Plan. 2014. URL: https://www.hse.ie/eng/services/list/5/cancer/profinfo/medonc/safetyreview/oncsafetyactionplan.pdf (accessed 5 September 2021).
189. National Cancer Control Programme. NCCP Oncology Medication Safety Review Report. Final implementation status report. 2017. URL: https://www.hse.ie/eng/services/list/5/cancer/profinfo/medonc/safetyreview/final%20report.pdf (accessed 5 September 2021).
190. Health Partners Consulting Group. Radiation Oncology National Linear Accelerator and Workforce Plan. Auckland. Health Partners Consulting Group, 2014.
191. Ministry of Health. New Zealand Cancer Plan: Better, faster cancer care 2015–2018. Wellington: Ministry of Health, 2014.
192. Helsedirektoratet. Nasjonal Handlingsplan for Kreft 2015-2017. Oslo: Helsedirektoratet, 2015.
193. Grady C. New National Cancer Strategy steering group announced. eHospice Ireland, May 25, 2015. URL: https://ehospice.com/ireland_posts/new-national-cancer-strategy-steering-group-announced/ (accessed 5 September 2021).
194. Department of Health. Development of a National Cancer Strategy for 2016-2025. Public Consultation 19 June 2015 – 24 July 2015. URL: https://www.imo.ie/i-am-a/consultant/live-issues/imo-submission-to-the-dep/DoH-Public-Consultation-on-the-Development-of-a-National-Cancer-Strategy-for-2016-2025.pdf (accessed 5 September 2021).
195. Sundheds- og Ældreministeriet. Patienternes Kræftplan – Kræftplan IV. København: Sundheds- og Ældreministeriet, 2016.

196. Regeringen, Danske Regioner, KL. Udmøntningsaftale om Kræftplan IV (2017-2020). URL: https://www.sst.dk/-/media/Viden/Kraeft/Kr%C3%A6ftplaner/Kr%C3%A6ftplaner-IV/Udmntningsaftale-om-Krftplan-IV-20172020-mellem-SUM-Danske-Regione.ashx?la=da&hash=FE7AE7D9F5C95BA2F5661B5F020826F607EC861E (accessed 5 September 2021).
197. Ministry of Health. The National Radiation Oncology Plan 2017 to 2021. Wellington: Ministry of Health, 2017.
198. Danske Regioner. Hvidbog for den Patientansvarlige Læge. 2017. URL: https://www.regioner.dk/media/4727/hvidbog-for-den-patientansvarlige-laege-2017.pdf (accessed 5 September 2021).
199. Danish Comprehensive Cancer Center. Danish Comprehensive Cancer Center. URL: https://www.dccc.dk/english/about-dccc/purpose-of-danish-comprehensive-cancer-center/ (accessed 5 September 2021).
200. Helse- og Strategi omsorgsdepartementet. Leve med kreft. Nasjonal kreftstrategi (2018–2022). URL: https://www.regjeringen.no/contentassets/266bf1eec38940888a589ec86d79da20/regjeringens_kreftstrategi_180418.pdf (accessed 5 September 2021).
201. Haward R. The Calman–Hine report: a personal retrospective on the UK's first comprehensive policy on cancer services. *The Lancet Oncology* 2006;7:336-46.
202. Commission for Health Improvement TAC. NHS Cancer Care in England and Wales. London: Commission for Health Improvement, 2001.
203. Cancer Services Expert Group. Cancer Services in Wales. A Report by the Cancer Services Expert Group. Volume 1. Cardiff: Cancer Services Expert Group, 1996.
204. National Institute for Clinical Excellence. Guidance on cancer services. Improving outcomes in breast cancer. London: National Institute for Clinical Excellence, 2002.
205. Committee for Health Social Services and Public Safety. Inquiry into the delivery of cancer services in Northern Ireland. Report 02/01/R. 2002. URL: http://archive.niassembly.gov.uk/health/reports/report2-01rvol1.htm (accessed 5 September 2021).
206. Scottish Cancer Co-ordinating and Advisory Committee. Commissioning cancer services in Scotland report. 1996. URL: https://www.sehd.scot.nhs.uk/mels/1996_54.pdf (accessed 5 September 2021).
207. Department of Health. The NHS Cancer Plan. London Department of Health, 2000.
208. National Audit Office. The NHS Cancer Plan: A progress report. London: The Stationary Office, 2005.
209. Welsh Assembly Government. Cancer services in Wales - re-issuing of minimum standards, change to waiting times guarantee for breast cancer and NICE work programme. Welsh Health Circular 22 September 2000. URL: http://www.wales.nhs.uk/documents/WHC%2800%2992%2Ehtm (accessed 5 September 2021).
210. House of Commons. Public Administration - Fifth Report. Scottish Executive. 2001. URL: https://publications.parliament.uk/pa/cm200001/cmselect/cmpubadm/367/367ii19.htm (accessed 5 September 2021)
211. National Institute for Health and Care Excellence. Suspected cancer: recognition and referral. NICE guideline [NG12]. 2015. URL: https://www.nice.org.uk/guidance/ng12 (accessed 5 September 2021).
212. Kunkler I. The organisation of cancer services: a UK perspective. In: Price P, Sikora K, Illidge T, eds. Treatment of cancer 5th edition. London: Hodder Arnold 2008:1377-406.
213. Secretary of State for Health. Saving lives: Our healthier nation. London: The Stationary Office, 1999.
214. Department of Health. The NHS Cancer Plan. Three year progress report. London: Department of Health, 2003.
215. NHS Scotland. Cancer in Scotland. Action for change. Edinburgh: The Stationary Office, 2001.
216. Scottish Government. Cancer in Scotland: action for change. National implementation/investment plan - 2001-2002. URL: https://www.sehd.scot.nhs.uk/publications/csii/csii-01.htm (accessed 5 September 2021).
217. Scottish Government. Cancer in Scotland: action for change. National implementation/investment plan – 2002-2003. URL: https://www.webarchive.org.uk/wayback/archive/20170701074158mp_/http://www.gov.scot/Resource/Doc/46922/0014166.pdf (accessed 5 September 2021).
218. NHS Wales. Improving health in Wales. A plan for the NHS with its partners. Cardiff: National Assembly for Wales, 2001.
219. Northern Ireland Cancer Network. Home. URL: https://nican.hscni.net/ (accessed 5 September 2021).
220. Scottish Executive. Cancer in Scotland. Sustaining change. Edinburgh: Scottish Executive, 2004.
221. Department of Health Social Services and Public Safety. Regional Cancer Framework. A Cancer Control Programme for Northern Ireland. Belfast: Department of Health, Social Services and Public Safety, 2007.
222. Welsh Assembly Government. Cancer Services in Wales – Publication of National Cancer Standards and the implication for Commissioners and Providers, through the Cancer Networks. Welsh Health Circular 15 June

2005. URL: http://www.wales.nhs.uk/sites3/documents/362/WHC_2005_051_ENGLISH.pdf (accessed 5 September 2021).

223. Department of Health. A Framework for the Development of Positron Emission Tomography (PET) Services in England. London: Department of Health, 2005.

224. Black L-A, McKay K. Cancer: Northern Ireland. NIAR 64-17. 2017. URL: http://www.niassembly.gov.uk/globalassets/documents/raise/publications/2017-2022/2017/health/3217.pdf (accessed 5 September 2021).

225. Scottish Executive Health Department. Radiotherapy activity planning for Scotland 2011-2015. Edinburgh: Scottish Executive Health Department, 2006.

226. Welsh Assembly Government. Designed to Tackle Cancer in Wales: A Welsh Assembly Government Policy Statement. 2006. URL: https://www.wales.nhs.uk/documents/Designed-to-tackle-Cancer.pdf (accessed 5 September 2021).

227. Cancer Research UK. Where next for cancer services in Scotland? An evaluation of priorities to improve patient care. 2017. URL: https://www.cancerresearchuk.org/sites/default/files/where_next_for_cancer_services_in_scotland_june_2017_-_full_report.pdf (accessed 5 September 2021).

228. Cancer Services Expert Group. Radiotherapy Equipment Needs and Workforce Implications 2006-2016. URL: http://www.wales.nhs.uk/sites3/Documents/322/Radiotherapy_equipment_needs_and_workforce_implications_2006_-_2016.pdf (accessed 5 September 2021).

229. National Radiotherapy Advisory Group. Radiotherapy: developing a world class service for England. London: Department of Health, 2007.

230. Department of Health. Cancer Reform Strategy. London: Department of Health, 2007.

231. Department of Health. Radiotherapy Services in England 2012. London: Department of Health, 2012.

232. Health and Social Services Committee. Review of Cancer Services for the People of Wales. Cardiff: National Assembly for Wales, 2007.

233. Department of Health. Diagnosing cancer earlier. 2011. URL: https://webarchive.nationalarchives.gov.uk/20110503152714/http://www.dh.gov.uk/en/Healthcare/Cancer/Earlydiagnosis/index (accessed 5 September 2021).

234. Department of Health Social Services and Public Safety. Service framework for cancer prevention, treatment and care. 2011. Belfast: Department of Health, Social Services and Public Safety, 2011.

235. Department of Health Social Services and Public Safety. Priorities for action 2010/11. URL: https://www.cardi.ie/userfiles/priorities_for_action_2010-11.pdf (accessed 5 September 2021).

236. The Scottish Government. Better cancer care, an action plan. Edinburgh: The Scottish Government, 2008.

237. National Audit Office. Delivering the Cancer Reform Strategy. London: The Stationary Office, 2010.

238. Department of Health. Improving outcomes: A strategy for cancer. London: Department of Health, 2011.

239. Health and Social Care Board. Commissioning Plan 2015/16. URL: http://www.hscboard.hscni.net/download/PUBLICATIONS/COMMISSIONING%20PLANS/Commissioning%20Plan%202015-2016.PDF (accessed 5 September 2021).

240. Welsh Government. Together for Health: Cancer Delivery Plan for the NHS to 2016. 2012. URL: https://www.iccp-portal.org/system/files/plans/120613cancerplanen.pdf (accessed 5 September 2021).

241. NHS England. Appraisal and Funding of Cancer Drugs from July 2016 (including the new Cancer Drugs Fund). URL: https://www.england.nhs.uk/wp-content/uploads/2013/04/cdf-sop.pdf (accessed 5 September 2021).

242. Cancer Research UK, The Royal College of Radiologists, Institute of Physics and Engineering in Medicine. The Radiotherapy Innovation Fund. An evaluation of the Prime Minister’s £23 million Fund. 2.013. URL: https://www.cancerresearchuk.org/sites/default/files/policy-radiotherapy-innovation-fund.pdf (accessed 5 September 2021).

243. Gov.UK. Press release. Eight thousand patients to benefit from advanced cancer treatment. 2012. URL: https://www.gov.uk/government/news/eight-thousand-patients-to-benefit-from-advanced-cancer-treatment (accessed 5 September 2021).

244. The Scottish Government. Beating cancer: ambition and action. Edinburgh: The Scottish Government, 2016.

245. National Audit Office. Progress in improving cancer services and outcomes in England. London: The Stationary Office, 2015.

246. Cancer Research UK, NHS England. Vision for radiotherapy 2014-2024. London: Cancer Research UK, NHS England, 2014.

247. NHS Scotland. Scottish Referral Guidelines for Suspected Cancer. 2019. URL: http://www.cancerreferral.scot.nhs.uk/Home (accessed 5 September 2021).

248. Independent Cancer Taskforce. Achieving world-class cancer outcomes: a strategy for England 2015-2020. London: NHS England, 2015.
249. Burns C, Mills M, McCauley L, et al. Exploring the caseload, activities and outcomes of a regional acute oncology service. Abstract. 2018. URL: https://www.macmillan.org.uk/_images/exploring-the-caseload-activities-and-outcomes-of-a-regional-acute-oncology-service_tcm9-331705.pdf (accessed 5 September 2021).
250. Wales Cancer Network. Welcome to the Wales Cancer Network. 2016. URL: http://www.walescanet.wales.nhs.uk/home (accessed 5 September 2021).
251. Welsh Government. Together for Health Cancer Delivery Plan. Annual Report 2014. URL: https://walescanceralliance.org/wp-content/uploads/2019/06/cdp_2014-1.pdf (accessed 5 September 2021).
252. NHS England. Achieving World-Class Cancer Outcomes: Taking the strategy forward. 2016. URL: https://www.england.nhs.uk/wp-content/uploads/2016/05/cancer-strategy.pdf (accessed 5 September 2021).
253. The Scottish Government. Cancer. 2020. URL: https://www.gov.scot/policies/illnesses-and-long-term-conditions/cancer/ (accessed 5 September 2021).
254. Wales Cancer Network. Wales Cancer Network. Cancer Delivery Plan for Wales 2016-2020. URL: http://www.walescanet.wales.nhs.uk/sitesplus/documents/1113/161114cancerplanen.pdf (accessed 5 September 2021).
255. NHS England. Cancer Alliances – improving care locally. 2019. URL: https://www.england.nhs.uk/cancer/cancer-alliances-improving-care-locally/ (accessed 5 September 2021).
256. NHS England. Achieving world-class cancer outcomes: a strategy for England 2015 – 2020. One year on 2015-16. URL: https://www.england.nhs.uk/wp-content/uploads/2016/10/cancer-one-year-on.pdf (accessed 5 September 2021).
257. Health Education England. Cancer workforce plan. Phase 1: Delivering the cancer strategy to 2021. URL: https://www.hee.nhs.uk/sites/default/files/documents/Cancer%20Workforce%20Plan%20phase%201%20-%20Delivering%20the%20cancer%20strategy%20to%202021.pdf (accessed 5 September 2021).
258. Government of Nova Scotia. Budget 2011. Better Care Sooner. URL: https://beta.novascotia.ca/sites/default/files/documents/budget-archive/Budget-2011-Better-Care-Sooner.pdf (accessed 5 September 2021).
259. Ministry of Health. National Cancer Programme: Work Plan 2012/13. Wellington: Ministry of Health, 2013.
260. Det Fongelige Finansdepartement. Tilleggsbevilgninger og omprioriteringer i statsbudsjettet 2006. St.prp. nr. 66 (2005–2006). URL: https://www.regjeringen.no/contentassets/210716a1f0ff427a893fda0caa2f128f/no/pdfs/stp200520060066000dddpdfs.pdf (accessed 5 September 2021).
261. Richards M, Thorlby R, Fisher R, et al. Unfinished business: An assessment of the national approach to improving cancer services in England 1995–2015. London Health Foundation, 2018.
262. Department of Health. Improving outcomes: A strategy for cancer. Impact Assessment (IA). 2011. URL: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/213768/dh_123505.pdf (accessed 5 September 2021).
263. Department of Health. Improving Outcomes: A Strategy for Cancer. Fourth Annual Report. London: Department of Health, 2014.
264. Scottish Executive Health Department. Our National Health: A plan for action, a plan for change. 2000. URL: https://www.sehd.scot.nhs.uk/onh/onh-00.htm (accessed 5 September 2021).
265. Cancer National Specialist Advisory Group. Radiotherapy equipment needs and workforce implications 2006-2016 (update report to 2020). URL: https://gov.wales/sites/default/files/publications/2019-10/radiotherapy-equipment-needs-and-workforce-implications-2006-2016-update-report-to-2020.pdf (accessed 5 September 2021).
266. Welsh Government. Together for Health. Cancer Annual Report 2016. Cardiff: Welsh Government, 2016.