



Cancer Care: The Role of Primary Care

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Cancer Facts & Figures 2009

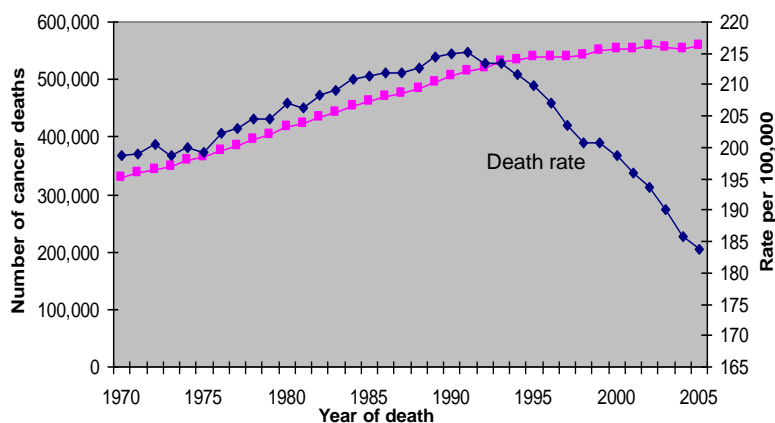
- More than 1.4 million new cancer cases and 565,000 cancer deaths are expected in 2009.
- The most common cancer diagnosed in men is prostate; in women, it is breast. These are followed by lung and colorectal in both sexes.
- These sites account for 50% of diagnoses.
- The five-year relative survival rate for all cancers combined is 66%, up from 50% in the mid-1970s.

Primary Care and Cancer

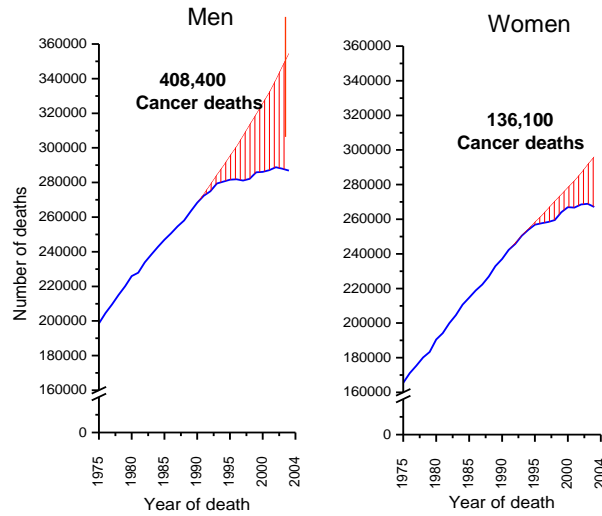
Each year a typical primary care physician:

- will have 3 – 5 patients given a new diagnosis of cancer, and
- will care for 20 – 25 patients who were previously treated for cancer

Trends in Actual Number of Cancer Deaths and Age-adjusted Cancer Death Rates, 1970-2005

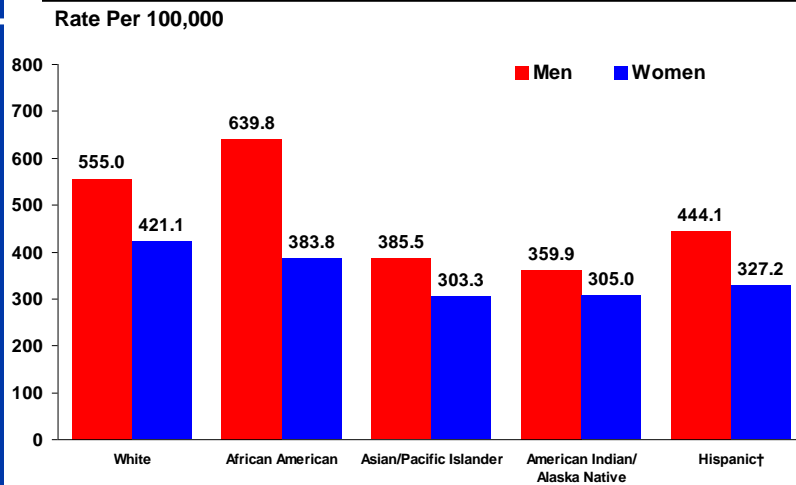


Total Number of Cancer Deaths Avoided from 1991 to 2004 in Men and from 1992 to 2004 in Women



The blue line represents the actual cancer deaths recorded in each year and the red line represents the expected number of cancer deaths if cancer mortality rates had remained the same since 1991/1992.

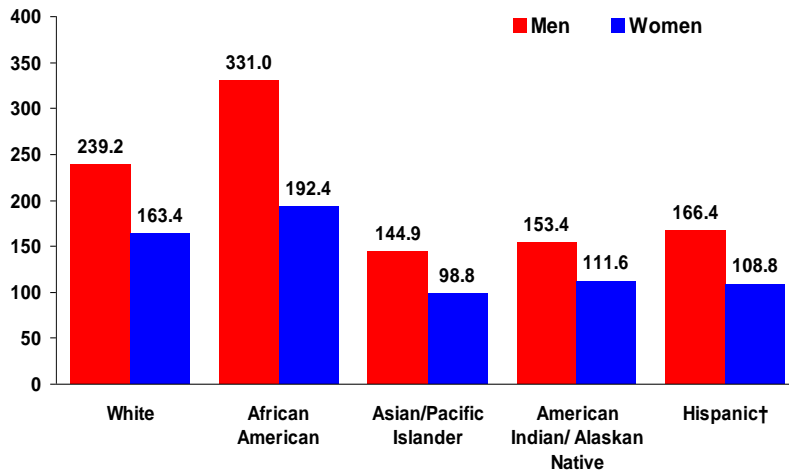
Cancer Incidence Rates* by Race and Ethnicity 1999-2003



Age-adjusted to the 2000 US standard population.
 † Person of Hispanic origin may be of any race.

Sources: Howe HL, et al. Annual report to the nation on the status of cancer 1975-2003; SEER, 1975-2003, Division of Cancer Control and Population Sciences, National Cancer Institute, 2006.

Cancer Death Rates*, by Race and Ethnicity, US, 1999-2003



*Per 100,000, age-adjusted to the 2000 US standard population.

† Persons of Hispanic origin may be of any race.

Source: Surveillance, Epidemiology, and End Results Program, 1975-2003, Division of Cancer Control and Population Sciences, National Cancer Institute, 2006.

Disparities in Breast Cancer Stage at Diagnosis by Insurance Status and Race (NCDB, 1998-2004)

Insurance	Stage III or IV vs. I	
	Stage II vs. I	I
Private	1.0 (Ref.)	1.0 (Ref.)
Uninsured	1.5*	2.9*
Medicaid	1.5*	2.7*
Medicare Age 65+	1.0	1.2*
Race		
Non-Hispanic White	1.0 (Ref.)	1.0 (Ref.)
Non-Hispanic Black	1.5*	1.9*
Hispanic	1.3*	1.3*

*Odds ratio is significant at the 95% confidence level.

Note: Model adjusted for insurance type, race/ethnicity, age at diagnosis, income, proportion without high school degree, US census region, year of diagnosis, and facility type.

Source: Halpern et al, 2007

Disparities in Treatment

Black and Hispanic women receive treatment at lower rates than counterparts:

Among women with stage I or II breast cancer and small tumors (< 5 cm) blacks, Mexicans and Puerto Ricans were 20%-50% more likely than whites to receive or elect a first course of surgical and radiation treatment not meeting National Comprehensive Cancer Network (NCCN) standards.

SEER data-Li et al, 2003

Disparities in Treatment

Henry Ford Hospital

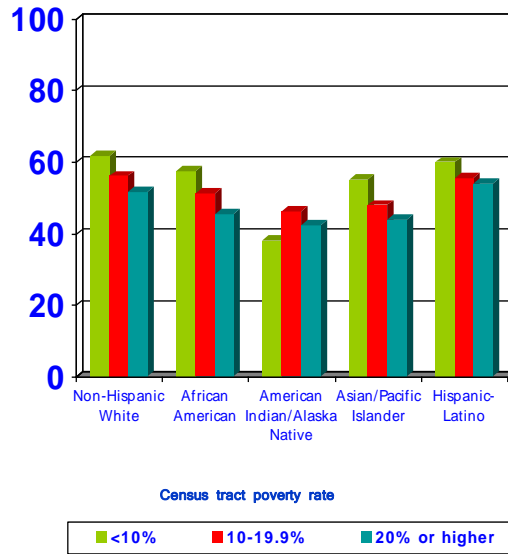
Radical Prostatectomy rates lower among African Americans than Whites

African American men had lower overall survival

No survival difference for men treated surgically

Tawari et al 2003

SEER Cancer Survival Among Men 1988-1994
Patient Cohort



Poverty is a carcinogen



Primary Care Role in Cancer Care

Phases of Cancer Care Spectrum

- Diagnosis
- Treatment
- Survivor
- End of Life

Primary Care Role in Cancer Care

PCP roles in the Diagnosis phase

- Inform patient and family of the suspected or confirmed diagnosis
- Referrals for
 - Confirmatory tests
 - Surgical and/or Oncologic consultation
- Discussion of family risks, needed notifications
- Help with decisions about treatment
- Information on clinical trials

Primary Care Role in Cancer Care

Clinical Trials

- Consider for:
 - Uninsured or underinsured
 - Unusual cancers
 - Cancers without proven standard treatment
 - Cancers unresponsive to standard treatment
- ACS Clinical Trials Matching Service
 - www.cancer.org ; search “clinical trials”
 - 1-800-303-5691
- ClinicalTrials.gov

Primary Care Role in Cancer Care

PCP roles in the Treatment phase

- Be familiar with
 - Treatment plan
 - Potential side effects/complications of treatment
 - Potential complications of cancer
- Encourage patient adherence with treatment regimen
 - Beware complementary and alternative medicines
- Manage or co-manage treatment side effects, complications
- Treat intercurrent disease
- Provide psychological support

Primary Care Role in Cancer Care

SORT: KEY RECOMMENDATIONS FOR PRACTICE

<i>Clinical recommendation</i>	<i>Evidence rating</i>	<i>References</i>
Treat chemotherapy-related nausea and vomiting with 5-hydroxytryptamine antagonists.	A	14
Manage chemotherapy-related anemia with epoetin alfa.	A	27, 28
Recommend exercise to mitigate fatigue and improve functional status in patients undergoing chemotherapy and radiation therapy.	B	38, 39
Treat cancer-related fatigue with psychosocial intervention.	B	40
Megestrol (Megace) improves weight gain and appetite in patients with cachexia caused by cancer.	A	52, 53
Massage and aromatherapy massage may enhance psychological well-being, including relief of anxiety, in patients with cancer.	B	61

A = consistent, good-quality patient-oriented evidence; B = inconsistent or limited-quality patient-oriented evidence; C = consensus, disease-oriented evidence, usual practice, expert opinion, or case series. For information about the SORT evidence rating system, see page 1135 or <http://www.aafp.org/afpsort.xml>.

Smith and Toonen, Am Fam Physician 2007

Primary Care Role in Cancer Care

Table 4. Adverse Effects of Chemotherapy

<i>Adverse effect</i>	<i>Onset</i>	<i>Evaluation</i>	<i>Treatment</i>
Diarrhea	Seven to 10 days after start of chemotherapy	Stool bacterial culture Stool <i>C. difficile</i> antigen Fecal occult blood testing	If <i>Clostridium difficile</i> positive, use metronidazole (Flagyl) If <i>C. difficile</i> negative, use an antimotility agent such as loperamide (Imodium) or diphenoxylate/atropine (Lomotil)
Alopecia	Seven to 10 days after start of chemotherapy	—	Shave remaining hair from head; wear wigs or scarves
Chemotherapy-induced anemia	Several weeks after start of chemotherapy	Rule out other causes of anemia (e.g., bleeding, hemolysis, nutritional deficiency)	Recombinant erythropoietin (epoetin alfa [Epogen], darbepoetin alfa [Aranesp]) if hemoglobin is less than 11 g per dL (110 g per L)

Information from references 25 through 28.

Smith and Toonen, Am Fam Physician 2007

Primary Care Role in Cancer Care

Table 5. Adverse Effects of Radiation Therapy

Site of radiation	Adverse effect	Treatment
Oral cavity	Mucositis	Saline/bicarbonate lavage; viscous lidocaine (Xylocaine), diphenhydramine elixir (Benadryl), simethicone (Mylanta), or Gelclair (oral gel that forms a protective coating that provides durable pain relief); sucralfate (Carafate) oral suspension
	Thrush	Antifungal treatments (nystatin [Mycostatin] swish and swallow, fluconazole [Diflucan] or itraconazole [Sporanox] orally)
Salivary glands	Xerostomia	Sialogogues (e.g., pilocarpine [Salagen]); intravenous amifostine (Ethyol) infusion daily before radiation therapy
Mandible	Temporomandibular joint fibrosis	Stretching exercises
	Osteoradionecrosis	Complete dental work before starting radiation therapy; hyperbaric oxygen; pentoxifylline (Trental)
Lungs	Pneumonitis	Prednisone (30 to 60 mg daily for 2 to 3 weeks) with appropriate tapering
	Fibrosis	Supportive care (e.g., oxygen, bronchodilators); pentoxifylline
Prostate	Obstructive uropathy	Alpha blockers (e.g., terazosin [Hytrin], doxazosin [Cardura], tamsulosin [Flomax]); finasteride (Propecia)
Bowel	Diarrhea	Low-residue diet; loperamide (Imodium); diphenoxylate/atropine (Lomotil); cholestyramine (Questran); octreotide (Sandostatin)
	Proctitis	Hydrocortisone cream; glucocorticoid retention enemas; mesalamine suppositories (Rowasa); sulfasalazine (Azulfidine)

Information from references 29 and 30.

Smith and Toonen, Am Fam Physician 2007

Primary Care Role in Cancer Care

Table 6. Cancer-Related Emergencies

Condition	Cause	Signs/symptoms	Diagnostic tests	Treatment
Spinal cord compression	Spinal column metastasis, local spread intramedullary metastasis	Back pain (early); neurologic deficit of the legs (late)	Magnetic resonance imaging of the spine	Corticosteroids, radiation, surgery, treat underlying malignancy
Superior vena cava syndrome	Mediastinal tumors, venous catheters	Neck, facial, periorcular swelling; dyspnea; cough; head pressure; hoarseness; nasal congestion; syncope	Computed tomography	Corticosteroids, radiation, supportive care, treat underlying malignancy
Pericardial tamponade	Lymphatic obstruction, pericardial metastasis	Dyspnea; orthopnea; chest pain; weakness	Echocardiography, pericardiocentesis	Pericardiocentesis, sclerosis, chemotherapy, pericardial window or stripping
Hypercalcemia	Bone metastasis, parathyroid hormone-related protein production, calcitriol excretion	Confusion; lethargy; sleepiness	Laboratory tests for calcium and electrolytes	Intravenous hydration, bisphosphonates
Tumor lysis syndrome	Rapid tumor cell destruction from chemotherapy, multiple electrolyte abnormalities, hyperuricemia	Nausea, weakness, myalgia, dark urine, arrhythmias	Laboratory tests for electrolytes and uric acid	Prevent by hydration, allopurinol (Zyloprim); treat electrolyte abnormalities, acidosis

Information from reference 32.

Smith and Toonen, Am Fam Physician 2007, based on Cervantes A, Chirivella I. Oncological emergencies. Ann Oncol 2004;15(suppl 4):iv299-306.

Primary Care Role in Cancer Care

Mental Health

- Increased prevalence of depression in cancer patients
- Underdiagnosed and undertreated because physicians
 - may accept symptoms as a normal response to the diagnosis
 - underestimate severity of symptoms
- Antidepressant medications effective
- Counseling, support groups may be beneficial during treatment and survivor phase


Primary Care Role in Cancer Care

PCP roles in the Survivor phase

- Chronic disease management
- Surveillance for cancer recurrence, delayed treatment complications (i.e. lymphedema)
- Preventive care, including screening for new cancers
- Assessment and recommendations re: family history, risks (if not addressed in earlier phases)

Individual Risk Based on Family History of CRC***	
Familial Setting	Approximate lifetime risk of colon cancer
No history of colorectal cancer or adenoma (General population in U.S.)	6%
One second or third-degree relative with CRC	About a 1.5 fold increase
One first-degree relative with an adenomatous polyp	About a 2 fold increase
One first-degree relative with colon cancer*	2-3 fold increase
Two second-degree relatives with colon cancer	About a 2-3 fold increase
Two first-degree relatives with colon cancer*	3-4 fold increase
First-degree relative with CRC diagnosed at < 50 years	3-4 fold increase

* First-degree relatives include parents, siblings, and children.
 Second-degree relatives include grandparents, aunts and uncles.
 Third-degree relatives include great-grandparents and cousins.



U.S. adults reported prevalence of family history of colorectal cancer (NHIS, 2000)

<u>Age</u>	<u>Family Hx of CRC (%)</u>	<u>(1 in <i>n</i>)</u>
20-29	0.7	1 in 142
30-39	2.6	1 in 38
40-49	5.4	1 in 18
50-59	6.9	1 in 14
60-69	10.0	1 in 10
70-79	9.8	1 in 10
Total	4.96	1 in 20

Cancer Family History

- Chart review of 995 patients in primary care setting...
 - Cancer family history was collected in 679 patients (68%)
 - Among these 679, only 414 (61%) had specific information about the affected relative and the cancer diagnosis

Cancer Risk Assessment, Murff et al

Cancer Family History

- Of 995 patients
 - Among all adults with a 1st degree relative with colorectal cancer, age at diagnosis was present in only 51% of charts
 - Age of 2nd degree relatives with colorectal cancer was present in only 32% of charts
 - No patients who might be candidates for early colonoscopy were identified

Cancer Risk Assessment, Murff et al

Survivorship

- Cancer survivors have increased risk of new primary cancer at same site or other sites
 - Breast cancer following radiation to chest for lymphoma
 - Rectal cancer after prostate radiation
- Survivors of childhood cancer
 - A rapidly growing population in primary care practices
 - 75% have one or more health problems.
 - Second cancers
 - Coronary artery disease
 - Lung problems
 - Endocrine disorders
 - 25% have five or more health problems.

Survivorship

Table 1. Survivorship care plan – recommended content¹

Part 1. Record of treatment

- Diagnostic tests performed and results
- Tumour characteristics (eg. site(s), stage and grade, hormone receptor status, marker information)
- Dates of treatment initiation and completion
- Surgery, chemotherapy, radiotherapy, transplant, hormone therapy, or gene or other therapies provided, including agents used, treatment regimen, total dosage, identifying number and title of clinical trials (if any), indicators of treatment response, and toxicities experienced during treatment
- Psychosocial, nutritional and other supportive services provided
- Full contact information on treating institutions and key individual providers
- Identification of a key point of contact and coordinator of continuing care

IOM report "From cancer patient to cancer survivor: lost in transition."
National Academics Press, 2006.

Survivorship

Part 2. Follow up care plan

- A description of recommended cancer screening and other periodic testing and examinations, and the schedule on which they should be performed (and who should provide them)
- Information on possible late and long term effects of treatment and symptoms of such effects
- Information on possible signs of recurrence and second tumours
- Information on the possible effects of cancer on marital/partner relationship, sexual functioning, work and parenting, and the potential future need for psychosocial support
- Information on the potential insurance, employment, and financial consequences of cancer and, as necessary, referral to counselling, legal aid and financial assistance
- Specific recommendations for healthy behaviours (eg. diet, exercise, healthy weight, sunscreen use, immunisations, smoking cessation, osteoporosis prevention). When appropriate, recommendation that first degree relatives be informed about increased risk and the need for cancer screening (eg. breast cancer, colorectal cancer, prostate cancer)
- As appropriate, information on genetic counselling and testing to identify high risk individuals who could benefit from more comprehensive cancer surveillance, chemoprevention or risk reducing surgery
- As appropriate, information on known effective chemoprevention strategies for secondary prevention (eg. tamoxifen in women at high risk for breast cancer; aspirin for colorectal cancer prevention)
- Referrals to specific follow up care providers (eg. rehabilitation, fertility, psychology), support groups, and/or the patient's primary care provider
- A listing of cancer related resources and information (eg. internet based sources and telephone listings for major cancer support organisations)

IOM report "From cancer patient to cancer survivor: lost in transition."
National Academics Press, 2006.

Primary Care Role in Cancer Care

PCP roles in End of Life phase

- Chronic disease management
- Assess family function and care-giver burden
 - Social service assistance
- Palliative care/Hospice care
- Psychological support for patient and family
- Pain management

Primary Care Role in Cancer Care

Pain

- Present in 70% – 90% of patients with advanced tumors
- Appropriate treatment can control pain in 90% of patients
- Inadequate pain management is common in cancer patients in general, and is more common in poor and minority patients
- Barriers to pain control include
 - Patient under-reporting of symptoms
 - Lack of physician knowledge of adequate pain tx
 - Inappropriate fears of medication abuse/addiction

Primary Care Role in Cancer Care

What do patients want/value?

- Be accessible; telephone access is particularly desired and appreciated
 - I don't know how much more supportive she can be, when you say, 'You can phone me at any time. ...'
- Care for acute and chronic disease
- Emotional support
- Information and support for family

Norman et al, Can Fam Physician 2001

References

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Thank You!