3
Cancer

3-1. Reduce the overall cancer death rate.

National Data Source	National Vital Statistics System (NVSS), CDC, NCHS.
State Data Source	National Vital Statistics System (NVSS), CDC, NCHS.
Healthy People 2000 Objective	16.1 (Cancer) (also 2.2), age adjusted to the 2000 standard population.
Measure	Rate per 100,000 population (age adjusted—see Comments).
Baseline	202.4 (1998).
Numerator	Number of deaths due to cancer (ICD-9 codes 140-208).
Denominator	Number of persons.
Population Targeted	U.S. resident population.
Questions Used To Obtain the National Data	Not applicable.
Expected Periodicity	Annual.
Comments	Data are age adjusted to the 2000 standard population. Age-adjusted rates are weighted sums of age-specific rates. For a discussion on age adjustment, see Part A, section 5.
	This objective differs from Healthy People 2000 objective 16.1, which age adjusted the death rates using the 1940 standard population. See Appendix C for comparison data.
	See Part C for a description of NVSS and Appendix A for focus area contact information.

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3-2. Reduce the lung cancer death rate.

National Data Source	National Vital Statistics System (NVSS), CDC, NCHS.
State Data Source	National Vital Statistics System (NVSS), CDC, NCHS.

Healthy People 2000 Objective	Adapted from 16.2 (Cancer) (also 3.2).
Measure	Rate per 100,000 population (age adjusted—see Comments).
Baseline	57.6 (1998).
Numerator	Number of deaths due to lung cancer (ICD-9 code 162).
Denominator	Number of persons.
Population Targeted	U.S. resident population.
Questions Used To Obtain the National Data	Not applicable.
Expected Periodicity	Annual.
Comments	Data are age adjusted to the 2000 standard population. Age-adjusted rates are weighted sums of age-specific rates. For a discussion on age adjustment, see Part A, section 5.
	This objective is measured with slightly different ICD-9 codes from those used to measure the comparable Healthy People 2000 objective 16.2 (ICD-9 code 162 vs. 162.2-162.9). Additionally, the Healthy People 2000 objective age adjusted the death rates using the 1940 standard population. See Appendix C for comparison data.
	See Part C for a description of NVSS and Appendix A for focus area contact information.

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3-3. Reduce the breast cancer death rate.

National Data Source	National Vital Statistics System (NVSS), CDC, NCHS.
State Data Source	National Vital Statistics System (NVSS), CDC, NCHS.
Healthy People 2000 Objective	16.3 (Cancer), age adjusted to the 2000 standard population.
Measure	Rate per 100,000 female population (age adjusted— see Comments).

Baseline	27.9 (1998).
Numerator	Number of female deaths due to breast cancer (ICD-9 code 174).
Denominator	Number of females.
Population Targeted	U.S. resident population.
Questions Used To Obtain the National Data	Not applicable.
Expected Periodicity	Annual.
Comments	Data are age adjusted to the 2000 standard population. Age-adjusted rates are weighted sums of age-specific rates. For a discussion on age adjustment, see Part A, section 5.
	This objective differs from Healthy People 2000 objective 16.3, which age adjusted the death rates using the 1940 standard population. See Appendix C for comparison data.
	See Part C for a description of NVSS and Appendix A for focus area contact information.

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3-4. Reduce the death rate from cancer of the uterine cervix.

National Data Source	National Vital Statistics System (NVSS), CDC, NCHS.
State Data Source	National Vital Statistics System (NVSS), CDC, NCHS.
Healthy People 2000 Objective	16.4 (Cancer), age adjusted to the 2000 standard population.
Measure	Rate per 100,000 female population (age adjusted—see Comments).
Baseline	3.0 (1998).
Numerator	Number of female deaths due to cancer of the uterine cervix (ICD-9 code 180).
Denominator	Number of females.
Population Targeted	U.S. resident population.

Questions Used To Obtain the National Data	Not applicable.
Expected Periodicity	Annual.
Comments	Data are age adjusted to the 2000 standard population. Age-adjusted rates are weighted sums of age-specific rates. For a discussion on age adjustment, see Part A, section 5.
	This objective differs from Healthy People 2000 objective 16.4, which age adjusted the death rates using the 1940 standard population. See Appendix C for comparison data.
	See Part C for a description of NVSS and Appendix A for focus area contact information.

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3-5.   Reduce the colorectal cancer death rate.

National Data Source	National Vital Statistics System (NVSS), CDC, NCHS.
State Data Source	National Vital Statistics System (NVSS), CDC, NCHS.
Healthy People 2000 Objective	Adapted from 16.5 (Cancer) (also 2.23).
Measure	Rate per 100,000 population (age adjusted—see Comments).
Baseline	21.2 (1998).
Numerator	Number of deaths due to colorectal cancer (ICD-9 codes 153, 154).
Denominator	Number of persons.
Population Targeted	U.S. resident population.
Questions Used To Obtain the National Data	Not applicable.
Expected Periodicity	Annual.

Comments	Data are age adjusted to the 2000 standard population. Age-adjusted rates are weighted sums of age-specific rates. For a discussion on age adjustment, see Part A, section 5.
	This objective is measured with slightly different ICD-9 codes from those used to measure the comparable Healthy People 2000 objective 16.5 (ICD-9 codes 153.0-154.3, 154.8, 159.0). Additionally, the Healthy People 2000 objective age adjusted the death rates using the 1940 standard population. See Appendix C for comparison data.
	See Part C for a description of NVSS and Appendix A for focus area contact information.

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3-6.   Reduce the oropharyngeal cancer death rate.

National Data Source	National Vital Statistics System (NVSS), CDC, NCHS.
State Data Source	National Vital Statistics System (NVSS), CDC, NCHS.
Healthy People 2000 Objective	Adapted from 13.7 (Oral Health) (also 3.17 and 16.17).
Measure	Rate per 100,000 population (age adjusted—see Comments).
Baseline	3.0 (1998).
Numerator	Number of deaths due to oropharyngeal cancer (ICD-9 codes 140-149).
Denominator	Number of persons.
Population Targeted	U.S. resident population.
Questions Used To Obtain the National Data	Not applicable.
Expected Periodicity	Annual.
Comments	Data are age adjusted to the 2000 standard population. Age-adjusted rates are weighted sums of age-specific rates. For a discussion on age adjustment, see Part A, section 5.

This objective differs from Healthy People 2000 objective 16.17, which age adjusted the death rates using the 1940 standard population. Additionally, the Healthy People 2010 objective targets the total population while the Healthy People 2000 objective targeted only persons 45 to 74 years. See Appendix C for comparison data.

See Part C for a description of NVSS and Appendix A for focus area contact information.

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3-7. Reduce the prostate cancer death rate.

National Data Source	National Vital Statistics System (NVSS), CDC, NCHS.
State Data Source	National Vital Statistics System (NVSS), CDC, NCHS.
Healthy People 2000 Objective	Not applicable.
Measure	Rate per 100,000 male population (age adjusted—see Comments).
Baseline	32.0 (1998).
Numerator	Number of male deaths due to prostate cancer (ICD-9 code 185).
Denominator	Number of males.
Population Targeted	U.S. resident population.
Questions Used To Obtain the National Data	Not applicable.
Expected Periodicity	Annual.
Comments	Data are age adjusted to the 2000 standard population. Age-adjusted rates are weighted sums of age-specific rates. For a discussion on age adjustment, see Part A, section 5.
	See Part C for a description of NVSS and Appendix A for focus area contact information.

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3-8. Reduce the rate of melanoma cancer deaths.

National Data Source	National Vital Statistics System (NVSS), CDC, NCHS.
State Data Source	National Vital Statistics System (NVSS), CDC, NCHS.
Healthy People 2000 Objective	Not applicable.
Measure	Rate per 100,000 population (age adjusted—see Comments).
Baseline	2.8 (1998).
Numerator	Number of deaths due to melanoma cancer (ICD-9 code 172).
Denominator	Number of persons.
Population Targeted	U.S. resident population.
Questions Used To Obtain the National Data	Not applicable.
Expected Periodicity	Annual.
Comments	Data are age adjusted to the 2000 standard population. Age-adjusted rates are weighted sums of age-specific rates. For a discussion on age adjustment, see Part A, section 5.
	See Part C for a description of NVSS and Appendix A for focus area contact information.

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3-9. Increase the proportion of persons who use at least one of the following protective measures that may reduce the risk of skin cancer: avoid the sun between 10 a.m. and 4 p.m., wear sun-protective clothing when exposed to sunlight, use sunscreen with a sun protective factor (SPF) of 15 or higher, and avoid artificial sources of ultraviolet light.

3-9a. (Developmental) Increase the proportion of adolescents in grades 9 through 12 who follow protective measures that may reduce the risk of skin cancer.

Comments	An operational definition could not be specified at the time of publication.
	The Youth Risk Behavior Surveillance System (YRBSS), CDC, NCCDPHP, is a proposed data source for this objective.
	See Appendix A for focus area contact information.

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3-9b. Increase the proportion of adults aged 18 years and older who follow protective measures that may reduce the risk of skin cancer.

National Data Source	National Health Interview Survey (NHIS), CDC, NCHS.
State Data Source	Behavioral Risk Factor Surveillance System (BRFSS), CDC, NCCDPHP.
Healthy People 2000 Objective	Adapted from 16.9 (Cancer).
Measure	Percent (age adjusted—see Comments).
Baseline	47 (1998).
Numerator	Number of adults aged 18 years and older who report that they are very likely to limit sun exposure, use sunscreen, or wear protective clothing.
Denominator	Number of adults aged 18 years and older.
Population Targeted	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data	From the 1998 National Health Interview Survey:

  ➢ *If you were to go outside on a very sunny day for MORE than one hour, are you very likely, somewhat likely, or unlikely to wear protective clothing such as wide brimmed hats or long sleeved shirts?*

  ➢ *If you were to go outside on a very sunny day for MORE than one hour, are you very likely, somewhat likely, or unlikely to avoid the sun by staying in the shade?*

  ➢ *If you were to go outside on a very sunny day for MORE than one hour, are you very likely, somewhat likely, or unlikely to use sunscreen or sun block lotion?*

Expected Periodicity	Annual.

Comments	For this objective, a person is defined as following protective measures if the person answers "very likely" to one or more of the questions listed above.
	Data are age adjusted to the 2000 standard population. Age-adjusted percents are weighted sums of age-specific percents. For a discussion of age adjustment, see Part A, section 5.
	Although similar questions are used to measure this objective and the comparable Healthy People 2000 objective 16.9, the data for the Healthy People 2010 objective are age adjusted while data for the Healthy People 2000 objective are unadjusted rates. Additionally, the Healthy People 2010 objective combines the data from the three questions into one measure while the Healthy People 2000 objective considered them individually.
	See Part C for a description of NHIS and BRFSS, and Appendix A for focus area contact information.

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3-10. Increase the proportion of physicians and dentists who counsel their at-risk patients about tobacco use cessation, physical activity, and cancer screening.

3-10a. Internists who counsel about smoking cessation.

Comments	A complete operational definition was not specified at the time of publication.
	This objective is adapted from Healthy People 2000 objectives 16.10 and 3.16.
	See Appendix A for focus area contact information.

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3-10b. Family physicians who counsel about smoking cessation.

Comments	A complete operational definition was not specified at the time of publication.
	This objective is adapted from Healthy People 2000 objectives 16.10 and 3.16.

See Appendix A for focus area contact information.

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3-10c. Dentists who counsel about smoking cessation.

Comments   A complete operational definition was not specified at the time of publication.

This objective is adapted from Healthy People 2000 objectives 16.10 and 3.16.

See Appendix A for focus area contact information.

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3-10d. Primary care providers who counsel about blood stool tests.

Comments   A complete operational definition was not specified at the time of publication.

This objective is adapted from Healthy People 2000 objective 16.10.

See Appendix A for focus area contact information.

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3-10e. Primary care providers who counsel about proctoscopic examinations.

Comments   A complete operational definition was not specified at the time of publication.

This objective is adapted from Healthy People 2000 objective 16.10.

See Appendix A for focus area contact information.

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3-10f. Primary care providers who counsel about mammograms.

Comments   A complete operational definition was not specified at the time of publication.

This objective is adapted from Healthy People 2000 objective 16.10.

See Appendix A for focus area contact information.

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3-10g. Primary care providers who counsel about Pap tests.

Comments   A complete operational definition was not specified at the time of publication.

This objective is adapted from Healthy People 2000 objective 16.10.

See Appendix A for focus area contact information.

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3-10h. Primary care providers who counsel about physical activity.

Comments   A complete operational definition was not specified at the time of publication.

This objective is adapted from Healthy People 2000 objective 16.10.

See Appendix A for focus area contact information.

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3-11. Increase the proportion of women who receive a Pap test.

3-11a. Women aged 18 years and older who have ever received a Pap test.

National Data Source   National Health Interview Survey (NHIS), CDC, NCHS.

State Data Source   Behavioral Risk Factor Surveillance System (BRFSS), CDC, NCCDPHP.

Healthy People 2000 Objective   16.12 (Cancer), age adjusted to the 2000 standard population.

Measure   Percent (age adjusted—see Comments).

Baseline   92 (1998).

Numerator	Number of women aged 18 years and older who report ever receiving a Pap test.
Denominator	Number of women aged 18 years and older.
Population Targeted	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data	From the 1998 National Health Interview Survey:

> *Have you ever had a pap smear test?*

Expected Periodicity	Periodic.
Comments	Data include women without a uterine cervix.
	Data are age adjusted to the 2000 standard population. Age-adjusted percents are weighted sums of age-specific percents. For a discussion of age adjustment, see Part A, section 5.
	See Part C for a description of NHIS and BRFSS, and Appendix A for focus area contact information.

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3-11b. Women aged 18 years and older who received a Pap test within the preceding 3 years.

National Data Source	National Health Interview Survey (NHIS), CDC, NCHS.
State Data Source	Behavioral Risk Factor Surveillance System (BRFSS), CDC, NCCDPHP.
Healthy People 2000 Objective	16.12 (Cancer), age adjusted to the 2000 standard population.
Measure	Percent (age adjusted—see Comments).
Baseline	79 (1998).
Numerator	Number of women aged 18 years and older who report receiving a Pap test within the past 3 years.
Denominator	Number of women aged 18 years and older.
Population Targeted	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data	From the 1998 National Health Interview Survey:

> *Have you ever had a pap smear test?*

   [If yes:]

   o *When did you have your most recent pap smear test? Was it a year ago or less, more than 1 year but not more than two years, more than two years but not more than three years, more than three years but not more than five years, or over 5 years ago?*

Expected Periodicity Periodic.

Comments Data include women without a uterine cervix.

Data are age adjusted to the 2000 standard population. Age-adjusted percents are weighted sums of age-specific percents. For a discussion of age adjustment, see Part A, section 5.

See Part C for a description of NHIS and BRFSS, and Appendix A for focus area contact information.

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3-12. Increase the proportion of adults who receive a colorectal cancer screening examination.

3-12a. Adults aged 50 years and older who have received a fecal occult blood test (FOBT) within the preceding 2 years.

National Data Source National Health Interview Survey (NHIS), CDC, NCHS.

State Data Source Behavioral Risk Factor Surveillance System (BRFSS), CDC, NCCDPHP.

Healthy People 2000 Objective 16.13 (Cancer), age adjusted to the 2000 standard population.

Measure Percent (age adjusted—see Comments).

Baseline 35 (1998).

Numerator Number of adults aged 50 years and older who report receiving fecal occult blood testing within the preceding 2 years.

Denominator Number of adults aged 50 years and older.

Population Targeted U.S. civilian, noninstitutionalized population.

Questions Used To Obtain the National Data	From the 1998 National Health Interview Survey:

> *A blood stool test is when the stool is examined to determine whether it contains blood. Have you ever had a blood stool test?*

  [If yes:]

  o *When did you have your most recent blood stool test? Was it a year ago or less, more than 1 but not more than 2 years, more than 2 years but not more than 3 years, more than 3 years but not more than 5 years, or more than 5 years ago?*

Expected Periodicity	Periodic.
Comments	A fecal occult blood test (FOBT) is referred to as a blood stool tests in the NHIS.
	Data are age adjusted to the 2000 standard population. Age-adjusted percents are weighted sums of age-specific percents. For a discussion of age adjustment, see Part A, section 5.
	See Part C for a description of NHIS and BRFSS, and Appendix A for focus area contact information.

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3-12b. Adults aged 50 years and older who have ever received a sigmoidoscopy.

National Data Source	National Health Interview Survey (NHIS), CDC, NCHS.
State Data Source	Behavioral Risk Factor Surveillance System (BRFSS), CDC, NCCDPHP.
Healthy People 2000 Objective	16.13 (Cancer), age adjusted to the 2000 standard population.
Measure	Percent (age adjusted—see Comments).
Baseline	37 (1998).
Numerator	Number of adults aged 50 years and older who report ever receiving a sigmoidoscopy.
Denominator	Number of adults aged 50 years and older.
Population Targeted	U.S. civilian, noninstitutionalized population.

Questions Used To Obtain the National Data	From the 1998 National Health Interview Survey:

> *A proctoscopic examination is when a tube is inserted in the rectum to check for problems. Have you ever had a proctoscopic examination?*

Expected Periodicity	Periodic.
Comments	A sigmoidoscopy is referred to as a proctoscopic examination in NHIS.
	Data are age adjusted to the 2000 standard population. Age-adjusted percents are weighted sums of age-specific percents. For a discussion of age adjustment, see Part A, section 5.
	See Part C for a description of NHIS and BRFSS, and Appendix A for focus area contact information.

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3-13. Increase the proportion of women aged 40 years and older who have received a mammogram within the preceding 2 years.

National Data Source	National Health Interview Survey (NHIS), CDC, NCHS.
State Data Source	Behavioral Risk Factor Surveillance System (BRFSS), CDC, NCCDPHP.
Healthy People 2000 Objective	Adapted from 16.11 (Cancer).
Measure	Percent (age adjusted—see Comments).
Baseline	67 (1998).
Numerator	Number of women aged 40 years and older who report receiving a mammogram within the past 2 years.
Denominator	Number of women aged 40 years and older.
Population Targeted	U.S. civilian, noninstitutionalized population.
Questions Used To Obtain the National Data	From the 1998 National Health Interview Survey:

> ➢ *A mammogram is an x-ray taken only of the breasts by a machine that presses the breast against a plate. Have you ever had a mammogram?*
>
> > [If yes:]
> >
> > o *When did you have your most recent mammogram? Was it a year ago or less, more than 1 year but not more than 2 years, more than 2 years but not more than 3 years, more than 3 years but not more than 5 years, or over 5 years ago?*

Expected Periodicity   Periodic.

Comments   Data are age adjusted to the 2000 standard population. Age-adjusted percents are weighted sums of age-specific percents. For a discussion of age adjustment, see Part A, section 5.

Although similar questions are used to measure this objective and the comparable Healthy People 2000 objective 16.11, the Healthy People 2010 focuses solely on mammograms received by women 40 years and older while the Healthy People 2000 objective measured women 50 years and older who received both mammograms and clinical breast examinations by. Additionally, the data for the Healthy People 2010 objective are age adjusted while data for the Healthy People 2000 objective are unadjusted rates.

See Part C for a description of NHIS and BRFSS, and Appendix A for focus area contact information.

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3-14. Increase the number of States that have a statewide population-based cancer registry that captures case information on at least 95 percent of the expected number of reportable cancers.

National Data Source   National Program of Cancer Registries (NPCR), CDC, NCI.

State Data Source   National Program of Cancer Registries (NPCR), CDC, NCI.

Healthy People 2000 Objective   Not applicable.

Measure   Number of States and the District of Columbia.

Baseline	21 (1999) (selected areas—see Comments).
Numerator	Number of States not covered by the SEER program that capture information on at least 95 percent of the expected number of malignant cases occurring in State residents each diagnosis year.
Denominator	Not applicable.
Questions Used To Obtain the National Data	Not applicable.
Expected Periodicity	Annual.
Comments	For the purpose of reporting to state registries, a diagnosis year is the date of initial diagnosis by a recognized medical practitioner for the tumor being reported.
	The NPCR provides funds to 45 States, 3 territories, and the District of Columbia to assist in planning or enhancing cancer registries; develop model legislation and regulations for programs to increase the viability of registry operations; set standards for data quality, completeness, and timeliness; provide training for registry personnel; and help establish computerized reporting and data processing systems. The Surveillance, Epidemiology, and End Results Program (SEER) covers the remaining five States.
	NPCR supported registries are expected to meet CDC data standards, as well as incorporate standards for data quality and format as described by the North American Association of Cancer Registries. Additional information on the standards for completeness, accuracy, and timeliness of central registry reporting, can be found at the following Web site: http://www.cdc.gov/cancer/.
	See Appendix A for focus area contact information.

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3-15. Increase the proportion of cancer survivors who are living 5 years or longer after diagnosis.

National Data Source	Surveillance, Epidemiology, and End Results Program (SEER), NIH, NCI.

State Data Source	Surveillance, Epidemiology, and End Results Program (SEER), NIH, NCI.
Healthy People 2000 Objective	Not applicable.
Measure	Percent.
Baseline	59 (1989–95) (selected areas—see Comments).
Numerator	5-year observed survival rate.
Denominator	5-year expected survival rate.
Population Targeted	Resident cancer survivors (selected areas—see Comments).
Questions Used To Obtain the National Data	Not applicable.
Expected Periodicity	Annual.
Comments	This measure is tracked with a calculation commonly referred to as the relative survival rate.
	The relative survival rate is calculated using a procedure whereby the observed survival rate is adjusted for expected mortality. The relative survival rate represents the likelihood that a patient will not die from causes associated specifically with the given cancer before some specified time (usually 5 years) after diagnosis.
	To calculate the relative survival rate, the observed survival rate is divided by the expected survival rate. The observed survival rate is based on all causes of death—no one is excluded except for those lost to followup. The expected survival rate is based on lifetables of surviving 1 year in the general population based on age (single year), race, sex, and year (1970, 1980, 1990) of the cohort of cancer patients. This calculation is used so that one does not have to depend on the accuracy and completeness of the cause of death information in order to calculate the effect of the cancer.

Survival rates are from the SEER program. They are based of data from population-based registries in Connecticut, New Mexico, Utah, Iowa, Hawaii, Atlanta, GA, Detroit, Michigan, Seattle-Puget Sound, WA, and San Francisco-Oakland, CA. The 1989–95 survival rates used in the baseline are based on patient followup through 1996.

Additional information on the SEER program can be found at the following Web site: http://www.seer.ims.nci.nih.gov/.

See Appendix A for focus area contact information.

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