Updated Kentucky Cancer Action Plan

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Assessment of Kentucky's Cancer Burden

(Taken from the Kentucky Cancer Registry 1998-2002 Cancer Incidence Report published in 2005)

The Surveillance, Epidemiology, and End Results (SEER) Program was established in 1971 as part of the National Cancer Act. The SEER Program is made up of 14 population-based cancer registries throughout the U.S. Date from the SEER registries provide an estimate of the cancer incidence rates in the U.S. Since the early 1990s, the North American Association of Central Cancer Registries (NAACCR) has annually collected data from the SEER registries and from other U.S. cancer registries that meet high standards for completeness, accuracy, and timeliness. These data are published annually in *Cancer Incidence in North America* and represent another estimate of cancer incidence rates for the United States.

The table below shows the five-year (1997-2001) age-adjusted invasive cancer incidence rates for the U.S. as estimated by SEER, by NAACCR, and for Kentucky. The rates are shown for all cancers combined, and for the four most frequently occurring types of cancer. In addition, the Kentucky rates for 1998-2002 are included in the last column for a comparison. This represents the most current data available at the time of publication.

Cancer Type	U.S. (SEER) 1997-01	U.S. (NAACCR) 1997-01	Kentucky 1997-01	Kentucky 1998-02
All Sites	470.3	unavailable	511.08	513.17
All Sites Male	554.3	566.1	618.81	620.91
All Sites Female	414.4	420.0	443.12	444.17
Lung & Bronchus	61.7	unavailable	99.60	99.80
Male Lung & Bronchus	79.1	90.0	139.83	138.38
Female Lung & Bronchus	49.1	54.0	71.20	72.34
Female Breast	135.2	132.2	127.62	126.84
Prostate	172.3	166.7	154.98	155.30
Colon & Rectum	53.7	unavailable	61.96	61.89
Male Colon & Rectum	63.4	67.1	73.47	73.10
Female Colon & Rectum	46.4	48.7	53.98	54.10

The Kentucky five-year (1997-2001) age-adjusted incidence rate for all cancers combined is higher than either the SEER or the NAACCR (1997-2001) incidence rates. The 1997-2001 incidence rates for lung and colorectal cancers are also higher in Kentucky

compared to either U.S. estimate. However, the incidence rates for breast and prostate cancers are lower in Kentucky compared to the SEER and the NAACCR rates. It is interesting to note that the 1998-2002 cancer incidence rates for all sites combined in Kentucky is higher than the 1997-2001 cancer incidence rates. However, for some sites the 1998-2002 rates are actually a bit lower.

Age-Adjusted Incidence Cancer Rates in KY, 1998-2002

Site	*Incidence*						*Mortality*					
	1998-2002			*2002*			*1998-2002*			*2002*		
	N	Rate	95% CI	N	Rate	95% CI	N	Rate	95% CI	N	Rate	95% CI
Lung	20433	99.89	98.52 - 101.27	4128	98.42	95.43 - 101.48	15992	78.55	77.34 - 79.78	3347	80.35	77.64 - 83.12
Oral Cavity	1669	8.15	7.76 - 8.55	334	7.91	7.08 - 8.81	305	1.5	1.02 - 1.77	56	1.36	1.02 - 1.77
Oral Pharynx	790	3.83	3.56 - 4.10	172	4.04	3.56 - 4.10	335	1.63	1.46 - 1.82	59	1.38	1.05 - 1.79
Bladder	227	1.13	0.99 - 1.29	45	1.09	0.79 - 1.46	115	0.57	0.47 - 0.69	20	0.48	0.29 - 0.74
Esophagus	991	4.85	4.56 - 5.17	192	4.59	3.96 - 5.29	885	4.35	4.07 - 4.65	187	4.47	3.85 - 5.16
Cervical	1243	11.64	11.00 - 12.31	223	10.26	8.95-11.72	351	3.18	2.86 - 3.53	54	2.39	1.79 - 3.14

All rates were adjusted to US. Standard 2000 population, per 100,000.
*The mortality rates were generated by using SEER*Stat 6.1.4*

- Cigarette smoking causes 87 percent of lung cancer deaths (1). Smoking is also responsible for most cancers of the larynx, oral cavity and pharynx, esophagus, and bladder. In addition, it is a cause of kidney, pancreatic, cervical, and stomach cancers (2, 3), as well as acute myeloid leukemia (2).

Selected References

1. Ries LAG, Eisner MP, Kosary CL, et al. (eds). *SEER Cancer Statistics Review, 1975–2001*, National Cancer Institute. Bethesda, MD, 2004 (http://seer.cancer.gov/csr/1975_2001).
2. U.S. Department of Health and Human Services. *The Health Consequences of Smoking: A Report of the Surgeon General*. Rockville, MD: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2004.

3. U.S. Department of Health and Human Services. *Targeting Tobacco Use: The Nation's Leading Cause of Death*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2003.

Age Adjusted Colorectal Cancer Rates in KY 1998 - 2002				
Site	**Incidence**		**Mortality**	
	N	Rate	N	Rate
Colorectal	13624	67.37	4544	22.99
*All rates were adjusted to US. Standard 2000 population, per 100,000. The mortality rates were generated by using SEER*Stat 5.3.1.*				

Colorectal Cancer Incidence by Stages & ADD in Kentucky, 1998-2002

	Purchase		***Pennyrile***		***Green River***		***Barren River***		***Lincoln Trail***		***Kipda***		***Northern KY***		***Buffalo Trace***	
Stage	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
In Situ	98	11.7%	37	5.8%	31	4.7%	77	9.8%	109	13.8%	329	11.0%	65	5.3%	17	7.8%
Early Stage	377	45.0%	284	44.5%	315	47.9%	333	42.2%	330	41.8%	1366	45.6%	561	45.8%	73	33.5%
Late Stage	248	29.6%	234	36.7%	230	35.0%	251	31.8%	283	35.9%	1039	34.7%	450	36.7%	89	40.8%
Unknown	115	13.7%	83	13.0%	81	12.3%	94	11.9%	67	8.5%	263	8.8%	149	12.2%	39	17.9%
Total	838		638		657		789		789		2997		1225		218	

	Gateway		***Fivco***		***Big Sandy***		***KY River***		***Cumberland Valley***		***Lake Cumberland***		***Bluegrass***	
Stage	N	%	N	%	N	%	N	%	N	%	N	%	N	%
In Situ	19	9.3%	80	14.7%	60	11.1%	24	7.0%	62	8.6%	53	8.2%	193	9.4%
Early Stage	87	42.6%	214	39.4%	214	39.6%	153	44.6%	291	40.5%	281	43.6%	893	43.3%
Late Stage	83	40.7%	183	33.7%	211	39.0%	130	37.9%	236	32.8%	242	37.6%	709	34.4%
Unknown	15	7.4%	66	12.2%	56	10.4%	36	10.5%	130	18.1%	68	10.6%	268	13.0%
Total	204		543		541		343		719		644		2063	

Age-Adjusted Incidence Cancer Rates in KY, 1998-2002

Site	*Incidence*						*Mortality*					
	1998-2002			*2002*			*1998-2002*			*2002*		
	N	Rate	95% CI	N	Rate	95% CI	N	Rate	95% CI	N	Rate	95% CI
Breast(female)	16696	149.81	147.54 - 152.11	3320	144.89	139.99 - 149.93	3103	27.09	26.15 - 28.07	652	27.63	25.54 - 29.86
Prostate	13508	155.52	152.85 - 158.23	2807	154.66	148.87 - 160.65	2146	30.66	29.34 - 32.03	411	28.1	25.38 - 31.07
Colorectal	13624	67.37	66.24 - 68.51	2651	63.81	61.41 - 66.30	4638	23.2	22.54 - 23.88	992	24.17	22.68 - 25.72
Stomach	1268	6.26	5.92 - 6.62	250	6.05	5.32 - 6.85	775	3.85	3.58 - 4.13	157	3.79	3.22 - 4.43
Skin Cancer	6215	30.43	29.68 - 31.20	1304	31.08	29.41 - 32.83	865	4.28	4.00 - 4.58	175	4.18	3.59 - 4.86

All rates were adjusted to US. Standard 2000 population, per 100,000.
*The mortality rates were generated by using SEER*Stat 6.1.4*

Female Breast Cancer Incidence by Stages & ADD in Kentucky, 1998-2002

	Purchase		*Pennyrile*		*Green River*		*Barren River*		*Lincoln Trail*		*Kipda*		*Northern KY*		*Buffalo Trace*	
Stage	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
In Situ	131	14.1%	121	13.9%	117	13.9%	159	16.9%	161	17.1%	545	14.0%	209	14.2%	21	10.7%
Early Stage	678	73.1%	566	65.0%	563	66.8%	669	71.2%	604	64.3%	2767	71.0%	909	61.8%	135	68.9%
Late Stage	69	7.4%	100	11.5%	73	8.7%	111	11.8%	108	11.5%	387	9.9%	147	10.0%	15	7.7%
Unknown	49	5.3%	84	9.6%	90	10.7%	72	7.7%	67	7.1%	199	5.1%	205	13.9%	25	12.8%
Total	927		871		843		940		940		3898		1470		196	

	Gateway		*Fivco*		*Big Sandy*		*KY River*		*Cumberland Valley*		*Lake Cumberland*		*Bluegrass*	
Stage	N	%	N	%	N	%	N	%	N	%	N	%	N	%
In Situ	50	16.9%	116	18.7%	73	12.7%	40	11.5%	79	10.7%	113	15.6%	452	16.1%
Early Stage	197	66.6%	375	60.4%	364	63.4%	240	69.2%	456	61.8%	489	67.4%	1907	67.8%
Late Stage	30	10.1%	80	12.9%	83	14.5%	43	12.4%	76	10.3%	87	12.0%	235	8.4%
Unknown	19	6.4%	50	8.1%	54	9.4%	24	6.9%	127	17.2%	37	5.1%	218	7.8%
Total	296		621		574		347		738		726		2812	

Cervical Cancer Incidence by Stages & ADD in Kentucky, 1998-2002

	Purchase		*Pennyrile*		*Green River*		*Barren River*		*Lincoln Trail*		*Kipda*		*Northern KY*		*Buffalo Trace*	
Stage	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Early Stage	31	68.9%	37	58.7%	32	66.7%	47	60.3%	53	67.1%	194	69.0%	70	64.2%	10	52.6%
Late Stage	6	13.3%	13	20.6%	7	14.6%	21	26.9%	21	26.6%	13	4.6%	28	25.7%	6	31.6%
Unknown	8	17.8%	13	20.6%	9	18.8%	10	12.8%	5	6.3%	55	19.6%	10	9.2%	3	15.8%
Total	45		63		48		78		79		281		109		19	

	Gateway		*Fivco*		*Big Sandy*		*KY River*		*Cumberland Valley*		*Lake Cumberland*		*Bluegrass*	
Stage	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Early Stage	14	73.7%	24	60.0%	36	52.2%	30	65.2%	55	63.2%	37	63.8%	120	72.7%
Late Stage	4	21.1%	8	20.0%	19	27.5%	9	19.6%	22	25.3%	15	25.9%	28	17.0%
Unknown	1	5.3%	8	20.0%	13	18.8%	7	15.2%	10	11.5%	6	10.3%	17	10.3%
Total	19		40		69		46		87		58		165	

Prostate Cancer Incidence by Stages & ADD in Kentucky, 1998-2002

	Purchase		*Pennyrile*		*Green River*		*Barren River*		*Lincoln Trail*		*Kipda*		*Northern KY*		*Buffalo Trace*	
Stage	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
In Situ	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	2	0.1%	1	0.1%	1	0.7%
Early Stage	487	65.7%	420	60.3%	410	58.9%	435	54.2%	519	67.9%	2342	68.6%	507	53.5%	99	66.9%
Late Stage	48	6.5%	76	10.9%	100	14.4%	82	10.2%	84	11.0%	353	10.3%	125	13.2%	14	9.5%
Unknown	206	27.8%	201	28.8%	186	26.7%	286	35.6%	161	21.1%	719	21.0%	314	33.2%	34	23.0%
Total	741		697		696		803		764		3416		947		148	

	Gateway		*Fivco*		*Big Sandy*		*KY River*		*Cumberland Valley*		*Lake Cumberland*		*Bluegrass*	
Stage	N	%	N	%	N	%	N	%	N	%	N	%	N	%
In Situ	1	0.6%	7	1.4%	2	0.5%	0	0.0%	0	0.0%	1	0.1%	2	0.1%
Early Stage	120	68.6%	248	48.7%	273	67.4%	203	67.7%	297	49.7%	419	60.9%	1329	61.3%
Late Stage	34	19.4%	49	9.6%	45	11.1%	46	15.3%	61	10.2%	78	11.3%	252	11.6%
Unknown	20	11.4%	205	40.3%	85	21.0%	51	17.0%	239	40.0%	190	27.6%	584	26.9%
Total	175		509		405		300		597		688		2167	

Cancers Incidence by Stages in Kentucky, 1998-2002

	All Cancers		*Cervical*		*Breast*		*Colorectal*		*Prostate*	
Stage	N	%	N	%	N	%	N	%	N	%
In Situ	7138	7.2%	0	0.0%	2387	14.7%	1254	9.5%	17	0.1%
Early Stage	44550	45.1%	790	65.7%	10919	67.1%	5788	43.9%	8108	62.1%
Late Stage	29273	29.6%	262	21.8%	1644	10.1%	4602	34.9%	1447	11.1%
Unknown	17771	18.0%	151	12.6%	1320	8.1%	1530	11.6%	3481	26.7%
Total	98732		1203		16270		13174		13053	

Cancers Incidence by Stages in Kentucky, 2002

	All Cancers		*Cervical*		*Breast(female)*		*Colorectal*		*Prostate*	
Stage	N	%	N	%	N	%	N	%	N	%
In Situ	1607	8.2%	0	0.0%	515	15.9%	262	10.3%	1	0.0%
Early Stage	9285	47.5%	131	60.9%	2231	68.7%	1119	44.1%	1906	73.1%
Late Stage	5990	30.6%	61	28.4%	314	9.7%	876	34.5%	268	10.3%
Unknown	2666	13.6%	22	10.2%	189	5.8%	280	11.0%	433	16.6%
Total	19548		215		3249		2537		2608	

	TARGET	BASELINE	DATA SOURCE
GOAL 1 - Reduce incidence & mortality from tobacco related cancers	KCC TARGET: Maintain 5-year lung cancer incidence rates at no more than 99.89 and lung cancer deaths to a rate of no more than 80.7 per 100,000 people in Kentucky.	See chart in Appendix A	KCR; 2002
What have others targeted?	• KY 2010 [17.2] Maintain lung cancer deaths to a rate of no more than 80.7 per 100,000 people in Kentucky.	• 80.7 per 100,000	KY State Ctr for Health Stats Health Data Branch, KY DOPH; 1997
OBJECTIVE 1.1 Increase the proportion of tobacco users in Kentucky who successfully quit.	KCC TARGET Increase the proportion of adult smokers who report quitting for one day or more in the last year.	45.6% or current adult smokers quit for one day or more within the past year (aged 18+) [CI 41.8-49.3)	CDC BRFSS; 2002
	KCC TARGET Increase the proportion of youth smokers who report quitting for one day or more in the last year.	60.1 Percentage of current youth (grades 9-12) smokers who tried to quit in the past 12 months (CI = +/- 4.6)	CDC YRBSS; 2003

	TARGET	BASELINE	DATA SOURCE
What have others targeted?	• KY 2010 [3.9 – proxy] Increase to 56% the proportion of youth smokers who quit for at least a day or more.	• 39.7%	• YRBS, YTS; 1997
	• KY Partnership for Tobacco Prevention and Control: By 2008, decrease the percent of adults reporting using cigarettes at least once in the past 30 days to no more than 27%.	• 30.7%	• BRFSS; 1997
	• KY Partnership for Tobacco Prevention and Control: By 2008, decrease the percent of adults who report using smokeless tobacco to no more than 2%.	• 4.8%	• BRFSS; 1995
	• KY Partnership for Tobacco Prevention and Control: By 2008, increase the percent of adult smokers who attempt to quit to 58%.	• 39.4%	• BRFSS; 1995

SUGGESTED STRATEGIES:

1.1.1 Make cessation resources and programs widely available in communities, including programs tailored to youth to support users who want to quit.

1.1.2 Increase the capacity of physicians and other health care providers to provide cessation advice and counseling.

OBJECTIVE	TARGET	BASELINE	DATA SOURCE
1.2 Reduce youth initiation of tobacco use. PRIORITY	KCC TARGET Increase the proportion of those in grades 9-12 who've never smoked.	28.9% (Confidence interval +/- 3.4)	YRBS; 2003
What have others targeted?	• KY 2010 (3.8) Increase to 32% those in grades 9-12 who've never smoked. • KY Partnership for Tobacco Prevention and Control: By 2008, decrease the percentage of high school students (9th-12th) reporting use of cigarettes on one or more of the previous 30 days to 30%.	• 22.7% • 37%	YRBS; Youth Tobacco Survey; 1997 KY Youth Tobacco Survey: 2000

SUGGESTED STRATEGIES:

1.2.1 Integrate evidence and research based tobacco use prevention into the school curriculum at all grade levels.

1.2.2 Include tobacco use prevention in the curriculum of colleges of education at Kentucky universities and encourage those pursuing careers in teaching to become smoke free themselves

1.2.3 Distribute prevention messages through existing youth-oriented community-based channels, such as youth sports, Scouts, 4-H Clubs, youth recreational organizations, YMCA/YWCA, and church groups.

1.2.4 Raise youth awareness through the media.

1.2.5* Support the increase or establishment of an excise tax for all tobacco products.
- No KY 2010 target. Cigarette tax rate per pack of 20: 30 cents

1.2.6 Eliminate promotion of tobacco products.

OBJECTIVE	TARGET	BASELINE	DATA SOURCE
1.3 Reduce or eliminate ETS exposure. PRIORITY	KCC TARGET Increase the number of towns and municipalities throughout the Commonwealth which are introducing smoke-free ordinances in public places.	At the time of press (May 2005), some level of clean air ordinance had passed in Lexington, Danville and Berea. The cities of Elsmere and Paducah had introduced some level of clean air ordinance legislation, but as of yet they had not passed.	
What have others targeted?	• KY 2010 [3.15] Increase to 100% the proportion of schools with tobacco-free environments including all school property, vehicles and at all school events.	• 99% policy to ban indoor smoking • 96.6% Policy bans smoking on school grounds • 92.7% Ban smoking at indoor school-related events that occur after school hours • 43.6% ban smoking at outdoor events that occur after school hours (N=691 respondents)	The KY DOPH / UK College of Nursing "School Policy Interview"; 2003
	• KY 2010 [3.16] Increase to 100% the proportion of worksites that prohibit smoking or limit it to separately ventilated areas.	• 71.9 %	DOPH Policy Survey School Health Politics and Programs Study; DOPH Workplace Smoking Policy Survey. KY Survey, UK Survey Research Center; 1999
	• KY 2010 [3.17] Increase to 51% the proportion of food service establishments that prohibit or limit it to separately ventilated areas.	• 32%	
	• KY Partnership for Tobacco Prevention and	• Students 96.8% and Employee	School Tobacco

OBJECTIVE	TARGET	BASELINE	DATA SOURCE
	Control: By 2008, increase the percentage of schools that ban tobacco use on all school property by either students or employees to 100%.	44.7%	Policy; 2001
	• KY Partnership for Tobacco Prevention and Control: By 2008, the percent of voluntary smoking ban policies in workplaces and restaurants will be increased to 65%.	• Workplaces = 43%; Restaurants = 34.7%	KY Workplace Tobacco Policy Survey & Food Service Establishment Smoking Policy Survey; 2000
	• KY Partnership for Tobacco Prevention and Control: By 2008, at least 3 cities and/or counties will pass a smoke-free ordinance and 10 cities and/or counties will conduct smoke-free ordinance campaigns.	• 0 for passing; 6 campaigns (Georgetown, Mt. Sterling, Owensboro, Morehead, Lexington, Louisville)	

SUGGESTED STRATEGIES:

1.3.1 Encourage, educate and assist in implementation of tobacco-free policies in work places, day care facilities, schools, and other public locations.

1.3.2* Mandate that schools be tobacco free campus-wide for faculty, staff, and students (including all school-sponsored events).

1.3.3 Enforce existing laws relating to smoke-free environments.

	TARGET	BASELINE	DATA SOURCE
GOAL 2 – Reduce incidence and mortality from colon cancer & other cancers related to inadequate nutrition and lack of physical activity.		See Appendix B	KCR
OBJECTIVE 2.1 Increase the percentage of Kentuckians who eat 5 or more servings of fruits and vegetables daily. PRIORITY	KCC TARGET Increase the proportion of Kentuckians age 18 and older who meet the Dietary Guidelines' minimum average daily goal of at least five servings of vegetables and fruits daily. KCC TARGET Increase the proportion of youth grades 9-12 who meet the Dietary guidelines' minimum average daily goal of at least five servings of vegetables and fruits daily.	20.2% age 18 and older (CI = 78.2 - .81.2) 13.2% grades 9-12	KY BRFSS; 2002 KY YRBSS; 2003
What have others targeted?	• KY 2010 (2.5) Increase to at least 40% the proportion of people age 2 and older who meet the Dietary Guidelines' minimum average daily goal of at least five servings of vegetables and fruits daily.	• 15.6 among people 18+; no data from YRBS noted for adolescents)	• Nat'l: Continuing Survey of Food Intakes by Individuals (CSFII) (2-day average), USDA; KY BRFS, YRBS; gap in data among children; 1998

	TARGET	BASELINE	DATA SOURCE

STRATEGY

2.1.1 Increase awareness of the nutrition goals and the health benefits of proper nutrition through the media and other communication channels.

2.1.2 Encourage consumer education by food retailers.

2.1.3 Increase the capacity of health care providers to provide nutrition advice, counseling, and referrals.

2.1.4 Encourage availability of healthy food choices at fast-food concessions in worksites, congregate eating sites, and other locations.

2.1.5* Support efforts to eliminate unhealthy food selections in schools, including vending machines. No KY 2010 target. UPDATE: Bill pass'd 3/8/05: ban sale of sugary soft drinks in elementary school vending machines and school stores during class hours. Only school-day approved beverages, such as water, 100% fruit juice and milk may be offered. Also, commercial fast food lunches may only be offered once per week. The state Ed Dept "will set regulations on sugary and fatty foods sold in school lunch lines and vending machines" so that they meet minimum nutritional standards based on the US Dept of Agric Dietary Guidelines. The regulations will address serving size, sugar and fat content of foods and beverages.

2.1.6* Incorporate nutrition education into the school curriculum at all grade levels.

	TARGET	BASELINE	DATA SOURCE
OBJECTIVE 2.2 Increase the percentage of Kentuckians who exercise moderately on a daily basis. PRIORITY	KCC TARGET Increase the proportion of Kentuckians aged 18 and older who engage regularly in physical activity for at least 20 minutes 3 or more times a week.	28.9% Individuals age 18 and older who report no moderate physical activity or less than 30 minutes per day, or less than five days per week and no vigorous physical activity or less than 20 minutes per day, or less than three days per week.	KY BRFSS; 2001
	KCC TARGET Increase the proportion of students who exercised or participated in physical activities for at least 20 minutes that made them sweat and breathe hard on three or more of the past seven days.	56.1% [CI = +/- 3.2%]	CDC YRBSS for KY; 2003
What have others targeted?	• KY 2010 [1.2] To increase to at least 50% the proportion of Kentuckians ages 18 and older who engage regularly in physical activity for at least 20 minutes 3 or more times a week.	• 30% engaged regularly in physical activity for at least 20 minutes 3 or more times per week.	KY BRFSS; 1998
	• KY 2010 [1.4] To increase to at least 20 percent the proportionof young people in grades K-12 who engage in moderate physical activity for at least 30 minutes on five or more of the previous seven days.	• 18.1% of grades 9-12. No baseline available for grades K-8	KY YRBS; 1997

SUGGESTED STRATEGIES:

2.2.1 Increase awareness among Kentuckians of the health benefits of physical activity and ways to incorporate it into daily activities.

2.2.2 Incorporate accessible physical activities within urban and rural community developments (i.e. walk ability of a community).

2.2.3* Incorporate physical activity education into the school curriculum at all grade levels. UPDATE: Bill pass'd 3/9/05: Elementary schools (K-5) shall develop a wellness policy that includes moderate to vigorous physical activity each day and encourages healthy choices among students. The policy may permit physical activity to be considered part of the instructional day, not to exceed 30 minutes a day, or 150 minutes per week."

	TARGET	BASELINE	DATA SOURCE
GOAL 3 – Reduce the incidence and mortality of skin cancers resulting from solar radiation.	KCC TARGET To reduce incidence and mortality of skin cancers resulting from solar radiation.	30.43% incidence rate from Skin Cancers excluding basal and squamous cell (includes melanoma) 4.26% mortality rate from Skin Cancers excluding basal and squamous cell (includes melanoma). See chart in Appendix C	KCR; 1998-2002
What have others targeted?	• No KY 2010 target		
OBJECTIVE 3.1 Increase the proportion of people of all ages who limit sun exposure, use sunscreens and protective clothing when exposed to sunlight, and avoid artificial light sources.	KCC TARGET: Developmental.	No Kentucky specific data available.	

SUGGESTED STRATEGIES:

3.1.1 Integrate sun safety and skin cancer prevention into the school curriculum at all grade levels.

3.1.2 Educate and encourage schools and day care facilities to protect children from sun exposure

3.1.3* Encourage designers of playgrounds and outdoor recreational facilities to provide adequate shade (i.e. sunscreen kiosk

3.1.4 Educate and encourage farmers, construction workers, and others in outdoor occupations to practice sun protection

3.1.5* Increase public awareness of sun safety and of the hazards of artificial light sources.

	TARGET	BASELINE	DATA SOURCE
GOAL 4 – Reduce the incidence and mortality of cancers related to environmental carcinogens.	KCC TARGET: Developmental	None available.	
What have others targeted?	No KY 2010 target.	None.	
OBJECTIVE 4.1 Increase the knowledge base on environmental carcinogens in Kentucky's environment.	KCC TARGET: Developmental	None.	
PRIORITY 4.2 Foster research and education on Kentucky-specific environmental causes of cancer.	KCC TARGET: Developmental	None.	
What have others targeted?	No KY 2010 targets.	None.	

SUGGESTED STRATEGIES:

4.2.1 Support research on the etiology of environmental cancers.

4.2.2* Encourage Kentucky researchers to apply for federal and nonprofit funding for research projects on environmental carcinogens

4.2.3 Monitor cancer incidence and potential environmental exposures.

4.2.4 Increase public education and awareness of environmental carcinogens.

EARLY DETECTION

	TARGET	BASELINE	DATA SOURCE
GOAL 5 – Reduce the proportion of late stage diagnosis and mortality from breast cancer through early detection and screening.	KCC TARGET Reduce the proportion of late stage diagnosis and mortality from breast cancer through early detection and screening.	27.11 = mortality rate (see Appendix C) Late stage = see Appendix D	KCR; 1998-2002 KCR; 1998-2002
What have others targeted?	• KY 2010 [17.3] Reduce breast cancer deaths to no more than 22.5 per 100,000.	• 28.1 per 100,000	KCR; 1997
OBJECTIVE 5.1 Increase the proportion of women who engage in breast cancer screening behaviors, according to appropriate guidelines, with special attention to "high risk" populations. PRIORITY	KCC TARGET Increase the proportion of women who engage in breast cancer screening behaviors, according to appropriate guidelines.	64.8% of women have ever received a mammogram. (CI = 62.2-67.3) 87.8% of women have had a clinical breast exam. (CI = 85.6-89.9) 70.2% of females age 50 and older have had a mammogram and a clinical breast exam in the past two years (CI = 95%)	CDC KY BRFSS 2002 CDC KY BRFSS 2002 KY BRFSS 2002
What have others targeted?	• KY 2010 [17.5] Increase to 85% the proportion of women 40+ who have ever r'cd a CBE and mammogram and to at least 85% those ages 50+ who have r'cd CBE and mammogram within past 2 years	• 78% & 73% respectively, in 1997; used when 2010 was written	KY BRFSS 1997

SUGGESTED STRATEGIES:

5.1.1* Establish an integrated ongoing public information program to foster a high degree of knowledge among women of all ages about breast cancer risks and benefits of early detection.

5.1.2 Promote and expand community level programs, such as breast cancer coalitions, to increase education about the risk of breast cancer and the need for screening (and re-screening) at appropriate intervals.

5.1.3 Encourage health care providers to routinely counsel women in their care to undergo breast cancer screening.

5.1.4 Integrate reminder systems into physician practices.

5.1.5 Increase the use of available financial resources for routine screening for uninsured and underinsured women.

5.1.6 Encourage in-state self-insured companies and in-state branches of out-of-state companies to provide screening mammography coverage in accordance with evidence based screening guidelines.

5.1.7* Ensure that age-eligible women in counties without mammography facilities have adequate access to breast cancer screening through facilities in adjoining counties and/or mobile mammography units.

5.1.8 Encourage hospitals and other health service organizations to offer free or low-cost breast cancer screening.

5.1.9 Develop and implement interventions targeting at-risk populations.

	TARGET	BASELINE	DATA SOURCE
OBJECTIVE 5.2 Assure quality (including compliance with guidelines) and effectiveness of screening methods.	KCC TARGET: Developmental	No data available.	
What have others targeted?	No KY 2010 target.	None.	

	TARGET	BASELINE	DATA SOURCE
GOAL 6 – Reduce incidence and mortality from cervical cancer by early detection through increased screening	KCC TARGET Reduce the incidence and mortality from cervical cancer.	Incidence rate = 11.64 Mortality rate = 3.57 See Appendix A & D	KCR; 1998-2002
	• KY 2010 [17.4] Reduce deaths from cancer of the uterine cervix to no more than 3.2 per 100,000 women in KY.	• 4.3 per 100,000	KY State Ctr for Health Stats Health Data Branch, KY DOPH for 1997
OBJECTIVE 6.1 Increase screening according to appropriate guidelines with special attention to "high risk" populations. PRIORITY	KCC TARGET: Increase screening from 84.9% of those who've received a pap in the past 3 years, and from 92.4% those who have ever received a pap.	84.9% pap w/in past 3 years 92.4% ever rec'vd pap	KY: BRFSS (CI = 12.4-18.4); 2002 CDC KY BRFSS: 2002
What have others targeted?	• KY 2010 [17.6] Increase to 95% women 18+ who have ever r'cd Pap and 85% those who r'cd Pap w/in 1-3 years	• 93% & 82% respectively	1997: Natl: National Health Interview Survey (NHIS), CDC, NCHS

	TARGET	BASELINE	DATA SOURCE

SUGGESTED STRATEGIES:

6.1.1* Establish an integrated, ongoing public information program to foster a high degree of knowledge among women about cervical cancer risks and early detection.

6.1.2 Develop and monitor programs that specifically target older women with the message.

6.1.3 Increase the number of health care providers who perform or refer women for regular pap tests and pelvic exams.

6.1.4 Reduce access barriers to screening

6.1.5 Develop and implement standards of care for patient reporting, tracking and follow-up.

	TARGET	BASELINE	DATA SOURCE
OBJECTIVE 6.2 Assure quality and effectiveness of Pap tests in laboratories serving KY women. PRIORITY	KCC TARGET: Developmental	None.	
What have others targeted?	No KY 2010 target.	None.	

SUGGESTED STRATEGIES:

6.2.1 Monitor laboratories in reading KY pap tests for compliance with rules and regulations of CLIA (Clinical Laboratory Improvement Amendments of 1988)

6.2.2* Develop and implement standards of care for patient reporting, tracking and follow-up.

	TARGET	BASELINE	DATA SOURCE
GOAL 7 – Reduce incidence and mortality from colorectal cancer by early detection through increased screening	KCC TARGET Reduce colorectal cancer incidence rate of 67.37 per 100,000 and mortality rate of 22.99 per 100,000 through early detection and screening.	See Appendix B	KCR; 1998-2002
	• KY 2010 [17.4] Reduce colorectal cancer deaths to no more than 23.5 per 100,000 women in KY.	• 25.3	KY State Ctr for Health Stats Health Data Branch, KY DOPH; 1996
OBJECTIVE 7.1 Increase screening according to appropriate guidelines, with special attention to "high risk" populations. PRIORITY	KCC TARGET Increase rates of appropriate colorectal screenings above baseline, with special attention to high risk populations.	56.1% of Kentuckians aged 50+ have <u>never</u> had a sigmoidoscopy or colonoscopy (CI = 53.7 – 58.6) African Americans aged 50+ who've never had a sigmoidoscopy or colonoscopy (CI = 38.5 – 64.7) Individuals age 50 and older who have <u>not</u> had a blood stool test in the past two years = 70.2% (CI of 67.8 – 72.5) African Americans aged 50+ who have not had a blood stool test in the past two years = 64.7 (CI = 50.7 – 76.6)	KY BRFSS; 2002 KY BRFSS; 2002 KY BRFSS; 2002 KY BRFSS; 2002

	TARGET	BASELINE	DATA SOURCE
What are others targeting?	• KY 2010 [17.8 – proxy] Increase to 35% people ages 50+ who received fecal occult blood testing w/in 1-2 years and 40% those received proctosigmoidoscopy	• 26% & 34% respectively	Nat'l: NHIS, NCHS, CDC; 1997

SUGGESTED STRATEGIES:

7.1.1* Increase access to recommended colorectal cancer screenings for Kentuckians, ages 50 and older.

7.1.2 Encourage health care providers to offer or refer patients for routine screening.

7.1.3 Establish an educational campaign on colorectal cancer risk factors and screening.

	TARGET	BASELINE	DATA SOURCE
OBJECTIVE 7.2 Assure quality and effectiveness of screening methods.	KCC TARGET: Developmental.	None.	
What have others targeted?	No KY 2010 Target.	None.	

SUGGESTED STRATEGIES:

7.2.1 Support research to identify and promote effective screening methods.

	TARGET	BASELINE	DATA SOURCE
GOAL 8 – Reduce mortality from prostate cancer by early detection through increased screening.	KCC TARGET Reduce incidence rate of 155.52 per 100,000 and mortality rate of 32.34 per 100,000 from prostate cancer, by early detection through increased screening.	See Appendix C & F	KCR; 1998-2002
What have others targeted?	• No KY 2010 target.	None.	
OBJECTIVE 8.1 Increase screening according to appropriate guidelines with special attention to "high risk" populations, such as African-Americans. PRIORITY	KCC TARGET Increase the proportion of men who are screened according to appropriate guidelines with special attention to "high risk" populations, such as African-Americans.	45.1% of men aged 40 and older have never had a PSA test. **(CI = 41.5 – 48.8)** % of African- American men aged 40 and older who have never had a PSA test = data unavailable. 42.8% of men aged 40+ who have never had a digital rectal exam. **(CI = 39.3 – 46.4)** % of African-American men aged 40+ who have never had a digital rectal exam = data not available.	KY BRFSS; 2002 No data KY BRFSS; 2002 No data
What have others targeted?	▪ KY 2010 [17.9 – proxy] Increase number of men aged 50 and older, particularly African Americans and other high risk individuals, who receive counseling from health care	▪ DEVELOPMENTAL. No baseline.	

	TARGET	BASELINE	DATA SOURCE
	providers about prostate cancer screening. ▪ KY 2010 [17.10 – proxy] Increase the percentage of persons aged 50 and older who have received oral, skin and digital rectal exams in the preceding year.	▪ DEVELOPMENTAL. No baseline.	

SUGGESTED STRATEGIES:

8.1.1* Develop targeted education and outreach programs for African-American men that focus on prevention, early detection, and information on best practices for prostate cancer treatment.

8.1.2 Provide access to current information on best practices for prostate cancer treatment.

8.1.3* Encourage men to talk to their health care providers about early detection of prostate cancer.

	TARGET	BASELINE	DATA SOURCE
OBJECTIVE 8.2 Assure quality and effectiveness of screening methods.	KCC TARGET: Developmental	None.	
What have others targeted?	No KY 2010 target.	None.	

SUGGESTED STRATEGIES:

8.2.1 Support research on the cause, detection and treatment of prostate.

	TARGET	BASELINE	DATA SOURCE
GOAL 9 – Increase the proportion of cancer patients with access to state-of-the-art cancer treatment services.			KCR
OBJECTIVE 9.1 Decrease the disparity in access to state of the art treatment services based on financial and/or insurance status. PRIORITY	KCC TARGET Decrease the disparity in access to state of the art treatment services based on financial and/or insurance status.	In KY, 87.3% of the population is covered by some type of health insurance. (Standard error= 0.9) 68.5% of the population has private insurance. (SE = 1.2) 30.5% of the population has government health insurance. (SE = 1.2) 4.5% of the population has military health care. (SE = 0.5) 14.6% of the population is covered by Medicaid. (SE = 0.9) 15.5% of the population is covered by Medicare. (SE = 0.9) 12.7% of the population was not covered any time during the year. (SE = 0.9) **NOTE: Individuals may have coverage from more than one payor source.	US Bureau of Labor Statistics and the Bureau of the Census; 2005

	TARGET	BASELINE	DATA SOURCE
		In KY, 9.8% of the adult population had difficulty obtaining medical care in the past year. (CI = 8.8 – 10.9)	KY BRFSS; 2002
		*Of respondents who needed medical care in the past year but could not get it, the main reason at 70.5%, was cost.	
		18.2 % of individuals aged 18 and older do not have any kind of health care coverage including health insurance, prepaid plans such as HMO's, or government plans such as Medicare. (CI = 16.6 – 20.0)	KY BRFSS; 2002
		28.7% of individuals aged 18 and older who have less than a high school education do not have any kind of health care coverage including health insurance, prepaid plans such as HMO's, or government plans such as Medicare. (CI = 24.6 – 33.2)	KY BRFSS; 2002
		36.7% of individuals aged 18 and older who make less than $15,000 a year do not have any kind of health care coverage including health insurance, prepaid plans such as HMO's, or government plans such as Medicare. (CI = 29.8 – 44.3)	KY BRFSS; 2002
		21.6%of African Americans aged 18 and older do not have any kind of health care coverage including health insurance, prepaid plans such	KY BRFSS; 2002

	TARGET	BASELINE	DATA SOURCE
		as HMO's, or government plans such as Medicare. (CI = 14.4 – 31.2)	
What have others targeted?	No KY 2010 target.	None.	

SUGGESTED STRATEGIES:

9.1.1* Educate community regarding how and where to access care if uninsured and ineligible.

9.1.2 Encourage in-state self-insured companies and in-state branches of out-of-state companies to provide cancer treatment coverage in accordance with current evidence-based treatment guidelines.

9.1.4* Promote and enroll people who are currently eligible for health-care services through Medicaid, and expand the eligibility.

9.1.5 Promote insurance coverage of treatment under clinical trials.

9.1.6 Work with policy makers to include diagnostic services in health care plans.

	TARGET	BASELINE	DATA SOURCE
OBJECTIVE 9.2 Decrease the disparity in access to state of the art treatment services based on geography. PRIORITY	KCC TARGET: Developmental.	17 cities in KY are home to 26 ACOS approved cancer program hospitals or medical centers. See map in Appendix H.	KCR See map of oncology centers

SUGGESTED STRATEGIES:

9.2.1 Expand educational programming, distance learning, and teleconference capabilities to cover rural areas throughout the state.

9.2.2 Encourage health care providers in remote areas to work collectively to increase access to diagnostic facilities, and to arrange for treatment specialists to establish office hours in their areas.

9.2.3* Increase free or low-cost transportation and housing options for persons, in remote areas, who have to travel for treatment services.

9.2.4* Invest in local health facilities and other community-based resources.

9.2.5* Increase the number of certified nurses, social workers, translators, and other healthcare professionals and funding for retaining professionals in underserved areas.

	TARGET	BASELINE	DATA SOURCE
OBJECTIVE 9.3 Increase patient participation in clinical trials.	KCC Target: Developmental.	In the US, fewer than 4% of qualified adult cancer patients participate in clinical cancer trials.	Newman LA, Hurd T, Leitch M, et al. A report on accrual rates for elderly and minority-ethnicity cancer patients to clinical trials of the American College of Surgeons Oncology Group. *J Am Coll Surg.* 2004 Oct; 199: 644-51. Wood CG, Wei SJ, Hampshire MK, Devine PA, Metz JM. The influence of race on the attitudes of radiation oncology patients towards clinical trial enrollment. *Am J Clin Oncol.* 2006 Dec; 29(6): 593-9.
		Based on nationwide accrual rates to clinical cancer trials, KY is one of five states to have the lowest rates of accrual per incident cancer cases.	Sateren WB, Trimble EL, Abrams J, et al. How sociodemographics, presence of oncology specialists, and hospital cancer programs affect accrual to cancer treatment trials. *J Clin Oncol.* 2002 Apr; 20(8): 2109-17. University of Kentucky Markey Cancer Center Clinical Research Coordinating Center 859-323-5127 OR www.oncology.mc.uky.edu/apps/mccsipsearch

	TARGET	BASELINE	DATA SOURCE
			University of Louisville James Graham Brown Cancer Center 502-562-4369 OR www.browncancercenter.com/patients/clinical.aspx National Cancer Institute www.cancer.gov/clinicaltrials National Institutes of Health www.clinicaltrials.gov Cancer Trials Support Unit www.ctsu.org Coalition of Cancer Cooperative Groups (CCCG) www.cancertrialshelp.org Children's Oncology Group www.childrensoncologygroup.org

SUGGESTED STRATEGIES:

9.3.1 Encourage physicians to inform and educate all cancer patients about the availability and benefits of clinical trials and to offer participation in clinical trials as a choice.

9.3.2 Increase patient education on the purpose and benefits of clinical trials.

9.3.3 Reduce financial and geographic barriers to participation in clinical trials.

	TARGET	BASELINE	DATA SOURCE
GOAL 10 – Increase health professionals' capacity to provide state-of-the-art cancer treatment services.	None.	KCR pattern of care study for colon and non-small cell lung cancer	KCR pattern of care study for colon and non-small cell lung cancer
PRIORITY OBJECTIVE 10.1 Increase the number of health care providers who follow practice guidelines of national professional organizations (i.e. National Comprehensive Cancer Network)	None.	None.	National Cancer Institute's Comprehensive Care Database (PDQ®) www.cancer.gov/cancertopics/pdq

SUGGESTED STRATEGIES:

10.1.1 Increase health professionals' awareness and use of the National Cancer Institute's PDQ and continuing medical education.

10.1.2 Integrate professionally accepted practice guidelines into health professional school curricula.

10.1.3 Increase physician-to-patient education as to the appropriate professional treatment guidelines for their situation.

10.1.4* Enhance relationships between medical specialists and academic medical facilities and researchers.

	TARGET	BASELINE	DATA SOURCE
GOAL 11 – Increase patient knowledge of treatment and self-care with special attention to culturally diverse and limited literacy groups.			
OBJECTIVE 11.1 Expand community capacity for providing patient access to cancer treatment information. PRIORITY	None	None	American Cancer Society www.cancer.org *Information available in English & Spanish. Asian & Pacific Islander materials also available. National Cancer Institute www.cancer.org *Information available in English & Spanish. Asian American Network for Cancer Awareness, Research & Training (AANCART) www.aancart.org Cancer Information Service (CIS) www.nci.nih.gov OR 1-800-4 CANCER *English & Spanish speaking operators

SUGGESTED STRATEGIES:

11.1.1* Expand and promote existing community and cancer information resources.

11.1.2 Improve and promote resource guides for cancer patients and their families.

11.1.3 Educate home health workers and others having contact with patients on providing information and referrals.

11.1.4 Expand network of patient navigators, including volunteers and trained social workers.

	TARGET	BASELINE	DATA SOURCE
11.2 Increase available culturally diverse and low-literacy cancer treatment information resources. PRIORITY	None	None	American Cancer Society www.cancer.org *Information available in English & Spanish. Asian & Pacific Islander materials also available. National Cancer Institute www.cancer.org *Information available in English & Spanish. Asian American Network for Cancer Awareness, Research & Training (AANCART) www.aancart.org Cancer Information Service (CIS) www.nci.nih.gov OR 1-800-4 CANCER *English & Spanish speaking operators

SUGGESTED STRATEGIES:

11.2.1 Identify special populations and work with opinion leaders in these cultures to disseminate appropriate treatment messages.

11.2.2* Promote and disseminate cancer treatment information, especially for special populations and low literacy groups.

11.2.3* Increase distribution channels in special population communities.

11.2.4 Promote use of Spanish language cancer information services.

	TARGET	BASELINE	DATA SOURCE
OBJECTIVE 11.3 Integrate patient-provider cultural and communication training into healthcare and allied health education and training programs. PRIORITY	None		Matthews-Juarez P, Weinberg AD. *Cultural Competence in Cancer Care: A Health Professional's Passport*. Houston: Baylor College of Medicine; 2006.
		"…As of 2000, 87% of US medical schools addressed cultural competence in 3 or fewer lectures during the preclinical years,[7] and 8% of schools offered separate courses on the topic. This compares with only 13% that included any such material in 1991.[8]	Flores G, Gee D, Kastner B. The teaching of cultural issues in US and Canadian medical schools. *Acad Med.* 2000;75:451-455. 8. Lum CK, Korenman SG. Cultural-sensitivity training in US medical schools. *Acad Med.* 1994;69:239-240.

SUGGESTED STRATEGIES:

11.3.1 Advocate Kentucky medical schools to add cultural competency courses to their curriculum.

QUALITY OF LIFE

In intro section include overarching goal: Ensure highest possible quality of life for cancer patients and their families, from diagnosis onward.

	TARGET	BASELINE	DATA SOURCE
GOAL 12 – Increase the proportion of cancer patients receiving services that improve the quality of life from diagnosis onward.	None.	None.	
OBJECTIVE 12.1 Identify quality of life programs proven to be effective (i.e., best practices).	None	None	

SUGGESTED STRATEGIES:

12.1.1 Establish quantifiable criteria to determine which programs are among the best practices for addressing cancer survivor needs

12.1.2 Identify best practices based on agreed upon criteria and rank order programs accordingly

12.1.3 Identify gaps in survivorship research and provide funding to test new models and approaches

		TARGET	BASELINE	DATA SOURCE
PRIORITY	OBJECTIVE 12.2 Increase quality of life resources available to patients and their families, with special attention to end of life resources.	None.	None.	

SUGGESTED STRATEGIES:

12.2.1 Increase availability of support groups/systems, information and counseling services.

12.2.2 Develop and support multidisciplinary palliative care teams specifically committed to symptom management that begins at diagnosis (inpatient and outpatient).

12.2.3 Encourage the development and/or use of cancer resource centers as a clearinghouse for cancer information. Educate health care providers in the use of these facilities.

		TARGET	BASELINE	DATA SOURCE
PRIORITY	OBJECTIVE 12.3 Increase utilization of available services that enhance quality of life for cancer patients from diagnosis onward.	None.	None.	

STRATEGY

12.3.1 Increase awareness of available services that enhance quality of life for cancer patients from diagnosis onward.

12.3.2 Work at the community level to increase access to cancer support services, through low cost transportation and placement of services in rural medical facilities.

12.3.3 Develop patient navigation or case management programs that improve quality of life.

12.3.4 Increase Human Resources/Workplace education regarding patient rights.

12.3.5 Advocate for more appropriate reimbursement of medically necessary psychosocial and palliative care.

12.3.6 Ensure adequate services and equitable quality of life for culture specific groups by focusing outreach efforts where people are, with an emphasis on collaboration with faith based groups, community centers, workplaces, etc

		TARGET	BASELINE	DATA SOURCE
PRIORITY	OBJECTIVE 12.4 Increase health professionals' provision of care that is sensitive to quality of life issues from diagnosis onward.			

STRATEGY

12.4.1 Refer all patients to existing community support services in a supportive and timely manner.

12.4.2 Increase referrals to hospice in a timely manner.

12.4.3 Inform physicians and nurses about the provisions of the ADA so that they may be able to assist cancer patients in obtaining entitlements under the statute.

12.4.4 Educate providers regarding resources and referrals on all legal and ethical end of life care options, and how best to discuss them with their patients.

12.4.5 Educate providers on effective pain management procedures.

12.4.6 Promote equitability of prescriptive practices for all Kentucky cancer survivors.

	TARGET	BASELINE	DATA SOURCE
OBJECTIVE 12.5 Increase awareness of concept of cancer as a chronic disease	KCC TARGET: Developmental.	None.	
What are others targeting?	No KY 2010 target.	None.	

SUGGESTED STRATEGIES:

12.5.1 Include updated definitions of survivorship in cancer treatment messages

12.5.2 Conduct trainings for health professionals, community health workers, and patient navigators on evolving concept of cancer survivorship

12.5.3 Promote and disseminate printed survivorship information, for both provider and patient, to medical facilities across Kentucky

12.5.4 Promote and disseminate information on effective pain management, from diagnosis onward.

Appendix

Kentucky Cities with American College of Surgeons Approved Cancer Programs