
Rural Healthy People 2010:

A Companion Document to Healthy People 2010

VOLUME 1: Introduction, Overviews, and Models for Practice



INTRODUCTION TO RURAL HEALTHY PEOPLE 2010

This document and the Rural Healthy People 2010 project (RHP2010) described here are intended to maximize the impact of Healthy People 2010 (HP2010) on health conditions in rural America. In particular, Rural Healthy People 2010 provides information to rural communities, administrators, health practitioners, and other leaders at the local, state, and national levels about rural health conditions identified as priorities by rural health leaders. At the same time, it describes promising community-based interventions and approaches currently being pursued in communities across the nation. Moreover, continued support of this project will provide information on other rural health priorities and the regular addition of new models for practice for any of the rural health priorities addressed.

The impetus for this project was the recognition that rural areas frequently pose different and, in some instances, greater challenges than urban areas in addressing a number of HP2010 objectives. There are rural-urban disparities in health conditions associated with particular preventable or chronic diseases and disparities in infrastructure or professional capacity to address health needs. There is ample evidence that some important rural-urban health disparities exist with respect to, for example, shortages of some types of primary care physicians (obstetricians and pediatricians), shortages of specialized mental health providers and oral health providers, prevalence of tobacco use and drinking-and-driving, and delays in screening and diagnosis of cancer. These and many other disparities are referenced later in this introduction and detailed in the following chapters. In addition, particular geographic, demographic, and cultural conditions in rural areas present obstacles to both rural residents seeking services and providers who would deliver them. We should note that although HP2010 publications include some rural-urban comparison data, a urban-rural chartbook¹ provides visual evidence of a number of such disparities across regions of the country. Also, HP2010 documents

include indicators for benchmarks and targets for many of the HP2010 objectives. These are not repeated here, but interested readers are encouraged to examine HP2010 documents at their website (<http://www.healthypeople.gov>).

It is not the purpose of the Rural Healthy People 2010 project to attempt to address all 28 of the Healthy People 2010 focus areas or even 100 of 467 objectives examined by so many experts within the HP2010 process. The purpose of this project and this document is to provide reviews of the literature highlighting rural disparities and needs in rural health priority areas and to offer examples of models for practice addressing selected rural health priority areas.

METHODOLOGY

The starting point for the Rural Healthy People project was to identify those HP2010 focus areas that should be considered rural health priorities. A first step in designing the project involved round-table discussions among many members of the School of Rural Public Health faculty. These discussions addressed HP2010 focus areas, issues addressed in recent publications such as the edited volume on rural health in America by Tom Ricketts and his associates,² the *Journal of Rural Health*, and various bases for selecting among HP2010 focus areas for RHP2010 to address. The discussion led to the identification of nine criteria to be considered in the selection of rural health priorities. Many of these criteria (see Table 1) were identified with existing sources of information that rationally linked individual criteria to related HP2010 focus areas; these sources are indicated by footnotes.

A second step was to begin an initial literature review and to identify sources of information that might be used to identify rural health conditions that rated highly on each particular criteria. The nine criteria were then arrayed against the 28 HP2010 focus areas, and each focus area was examined

Table 1. Initial Criteria for Selecting Rural Health Priorities.

<ul style="list-style-type: none"> • <i>Identified by rural people</i> as a high priority.³ • Overall <i>prevalence</i> in rural areas ^{1,4} • A <i>disproportionate prevalence</i> in rural areas^{1,4} • Impact of the issue on <i>mortality</i>⁵ • Impact of the issue on <i>morbidity</i>⁶ • The issue is a <i>contributor</i> to other health problems⁷ • The condition’s <i>causes are known</i>⁸ • <i>Feasible solutions</i> for rural communities⁹ • Community <i>interventions are “known” to work</i>

Rural Health Priority Survey #1 (E-Mail Survey of National and State Experts)

There was scant information on one criteria—priorities identified by rural people. To address this, RHP2010 staff conducted an e-mail survey in spring 2001 targeting 90 national and state rural health experts. Included in this survey were all of the state offices of rural health and selected staff members of ORHP, Congressional rural caucus, and national rural health research centers. Respondents were referred to the HP2010 website and then were asked to list several rural health needs or issues (or goals or objectives from Healthy People 2010) that came immediately to mind as major rural health priorities. Forty-four of 90 state and national experts responded. Table 2 presents the topics that were most frequently nominated as priorities.

Results of this RHP2010 survey (the first of two) show that nearly all of the respondents’ statements of priorities fit within the existing 28 focus areas established within the HP2010 document. Of the 14 rural health topics identified by over 20 percent of the respondents, five topics deal with aspects of access — access to emergency medical services,

against indicators identified for each of the nine criteria. A generalized depiction of the initial sources examined for selection of rural health priorities appears in Figure 1.

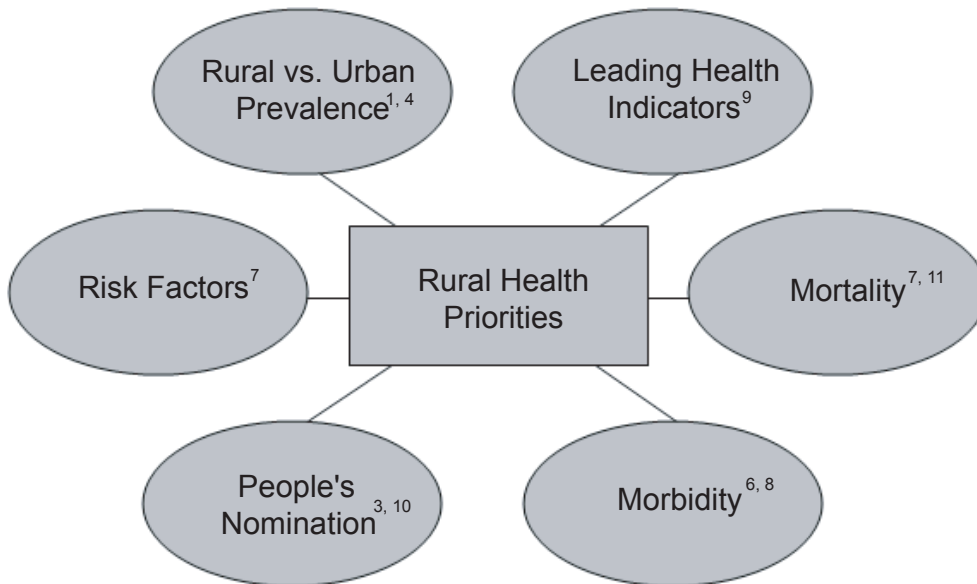


Figure 1. Initial Factors Examined for Selection of Rural Priorities.

Table 2. Rural Health Priorities Identified by National and State Rural Health Experts, Spring 2001.

Rural Priorities (identified by 15% or more)	Percent of Respondents (N=44)
Access to health care (includes one or more of the following):	73%
Access to emergency medical services	32%
Access to health workforce	29%
Access to health services (general)	29%
Access to health insurance	26%
Access to primary care	24%
Mental health	49%
Oral health	41%
Educational and community-based programs	29%
Diabetes	26%
Injury and violence prevention	26%
Nutrition and overweight	21%
Public health infrastructure	21%
Tobacco	21%
Maternal, infant, and child health	18%
Occupational safety and health	18%
Cancer	15%
Environmental health	15%
Heart disease and stroke	15%

Adapted from Gamm and Bell, 2001.¹⁰

health services, health workforce, primary care, and health insurance. Nearly three quarters (73 percent) of the respondents note one or more access-related topics. The next highest percentages of nominations for individual topics appearing in Table 2 are for mental health and oral health. These two areas, too, include other elements of access—access to mental health professionals and dentists. Educational and community programs, diabetes, injury and violence prevention, nutrition and overweight, public health infrastructure, substance abuse, and tobacco were the remaining seven areas nominated by over 20 percent of the respondents.

In this same survey, the national and state rural health experts were asked to rate, on a five-point scale, the degree of importance of each of the nine criteria proposed for selecting rural health priorities for further study. The nine criteria for assessing rural health priorities, grouped according to three general levels of importance reflecting the responses, are presented in Table 3.

Table 3. Importance Ratings for Criteria for Selecting Rural Priorities (Average of Ratings).

<p><i>Most Important – (4.3)</i></p> <ul style="list-style-type: none"> • Has been <i>identified by people living in rural areas</i> as a high priority health issue for them <p><i>Very Important - (4.0)</i></p> <ul style="list-style-type: none"> • Overall <i>prevalence in rural areas</i> (i.e., how common is the problem or condition) • Whether there is a <i>disproportionate prevalence</i> in rural areas compared to non-rural areas <p><i>Important-to-Very Important— (3.7-3.8)</i></p> <ul style="list-style-type: none"> • Impact of the condition or problem on <i>mortality</i> • Impact of the condition or problem on <i>morbidity</i> • Is considered to be a <i>contributor</i> to many other health problems • <i>Causes</i> of the condition or problem <i>are known</i> so that effective interventions or solutions could be identified • <i>Solutions or interventions are feasible</i> in rural communities (e.g., not too costly, not too complicated, does not require major system change at state or national level) • <i>Community interventions</i> or model programs exist and <i>are “known” to work</i> <p><i>Note: Respondents rated the criteria on a five-point scale: 5=Most important, 4=Very Important, 3=Important, 2=Less Important, 1=Not Important. Most respondents chose to score more than one criteria at a rating of “5”; few rated any of the criteria at less than “3.” The survey found substantial agreement among the respondents on the importance of all the criteria, with a heavier emphasis on a few of these.</i></p>

The importance of attending to what “people living in rural areas” identified as rural health priorities was underscored in presentation and discussion of the results of the survey at the National Rural Health Association’s (NRHA’s) annual conference in Dallas, May 2001.¹⁰ Responses to the survey and feedback from staff of other rural health research centers, ORHP staff members, and other attendees at the conference suggested a need for a second, broader survey seeking more input from state and local representatives.

A second survey, using standard mail survey methodologies¹² was conducted from July through October 2001. Questionnaires were mailed to 975 people representing state and local organizations with a commitment to rural health. The sample included four categories: statewide entities (offices of rural health, state primary care offices, state primary care associations, state rural health associations); local rural public health agencies;

rural health clinics and community health centers; and rural hospitals, principally critical access hospitals. For the three categories of local respondents, the project attempted to reach equal numbers of randomly selected organizations from each state. The local respondents were selected from lists of the organizations provided by the relevant federal agencies and trade associations. An additional 24 state and local rural experts, nominated by respondents, were surveyed as well. After a reminder and follow-up mailing, 501 leaders of state and local rural health-focused organizations responded, a response rate of 51.4 percent. Rates of response varied from 50 percent for rural hospitals to 61 percent for state agencies and associations.

The respondents, presented with a list of the 28 HP2010 focus areas, were asked to check five of the 28 that they believed to be top rural health priorities. The survey results reflected a wide distribution of priority selections, with “access to quality health

services” the one nominated most frequently.¹³ The priorities nominated in the second survey were quite consistent with the results of the first survey; a major exception is the higher rating given to the heart and stroke focus area in the second survey. The 10 focus areas that were selected by at least 20 percent of respondents in the second survey were then chosen by project staff as the nominated rural health priorities to be considered for inclusion in the Rural Healthy People 2010 companion document (see Table 4).

Shown in Table 4 are the 16 focus areas that were nominated as one of the rural health priorities by 13 percent or more of the respondents, based on average across the four types of state and local rural leader respondents.¹⁴ Two additional focus areas were nominated by approximately 10 percent of the respondents—physical fitness and activity, and respiratory diseases. All of the remaining 10 HP2010 focus areas were nominated as rural health priorities by an average of 5 percent or less of respondents across the four state and local groups; these focus areas include arthritis, osteoporosis, and chronic back conditions; health communication; occupational safety and health; sexually transmitted diseases; chronic kidney disease; HIV; vision and hearing; disability and secondary conditions; food safety; and medical product safety.¹³

There are some interesting variations in priority selections according to the type of state and local respondent groups and the geographic location of the respondents (classified according to four major census regions in the United States).¹⁴ Such variations are indicated in Table 4 by placing percentages in bold type and are described in the focus area overviews in Volume 1 and literature reviews in Volume 2.¹⁴

More important may be that there is substantial agreement on the top five rural health priorities across the groups of state and local respondents and the regions. Access, for example, is the top priority among all groups and all regions. The remaining four of the top five ranking priorities, moreover, received percentage ratings placing them in the top five for at least three of the state and local respondent groups

and three of the four geographic regions. Additional comments on these priorities are offered after a preview of the literature review component of this work.

Literature Reviews on Selected Rural Health Priorities

Rural Healthy People 2010 literature reviews began in the Spring of 2001. Initial discussion projected that access to primary care, diabetes, mental health, and several other topics would be among the rural health priorities selected for the companion document.

Literature reviews focused on numerous sources including, but not limited to, the following:

- PubMed (combines MEDLINE® and HealthSTAR),
- PsycInfo,
- Sociology Abstracts,
- Social Services Abstracts,
- Foundation websites,
- Government agencies' websites,
- RICHS – USDA,
- CRISP - NIH,
- Non-governmental organizations (NGOs), and
- General Internet sources.

Additionally, several recent books^{2, 15, 16} and reports¹ and a supplemental issue of the *Journal of Rural Health* (2002) on rural health research that address a number of RHP2010 conditions were examined. Loue and Quill¹⁶ and the supplemental issue of the *Journal of Rural Health* appeared while the project was underway; a pre-publication draft of the urban-rural chartbook¹ was available to the staff at the beginning of the project.

Selection of specific topics and subjects within each priority area were guided by specific Healthy People 2010 objectives identified by respondents in the survey and/or expertise of the researcher. Initial

Table 4. Rural Health Priorities—Organizational and Regional Comparisons by Percentages and Ranks.

Avg. Pct.	Percents of Organizations Choosing ^(a)				Rank of HP2010 Focus Areas [†]	Priority Rankings by Organization			
	State Orgs	Pub H. Units	Centers Clinics	Rural Hosp		State Orgs	Public H. Units	Centers Clinics	Rural Hosp
73	90	66	68	68	1*** Access to Quality Health Services	1	1	1	1
41	26	37	43	59	2*** Heart Disease & Stroke	7	3	4	2
40	35	21	52	52	3*** Diabetes	4	12	2	3
37	51	21	47	30	4*** Mental Health & Mental Disorders	3	12	3	5
35	54	32	39	14	5*** Oral Health	2	4	5	14
26	17	39	24	25	6** Tobacco Use	11	2	8	7
25	21	31	25	25	6 Substance Abuse	10	5	7	7
25	30	19	20	30	6 Educational & Community-Based Programs	5	10	15	5
24	22	28	24	22	6 Maternal, Infant, & Child Health	9	7	8	9
22	14	28	31	16	10*** Nutrition & Overweight	12	7	6	13
22	12	24	19	31	10** Cancer	14	11	11	4
21	29	27	12	17	12*** Public Health Infrastructure	6	9	14	11
17	10	27	15	17	13** Immunization & Infectious Diseases	15	9	13	11
16	23	17	10	13	14* Injury & Violence Prevention	8	16	15	15
13	9	20	17	6	15** Family Planning	16	14	12	18
13	13	29	6	3	15*** Environmental Health	13	6	19	22
Avg. Pct.	Percents within Regions Choosing				Rank of HP2010 Focus Areas [†]	Priority Rankings by Region			
	North-east	Mid-west	South	West		North-east	Mid-west	South	West
73	67	69	74	77	1 Access to Quality Health Services	1	1	1	1
41	33	52	48	26	2*** Heart Disease & Stroke	7	2	3	8
40	37	38	50	37	3 Diabetes	5	3	2	4
37	42	35	32	48	4* Mental Health & Mental Disorders	3	4	5	2
35	40	32	36	39	5 Oral Health	4	5	4	3
26	43	31	25	17	6*** Tobacco Use	2	6	8	13
25	35	22	16	33	7** Substance Abuse	6	10	12	5
25	18	20	24	32	7 Educational & Community-Based Programs	11	11	9	6
24	22	19	23	30	9 Maternal, Infant, & Child Health	10	12	10	7
22	30	29	26	15	10* Nutrition & Overweight	8	7	7	14
22	12	28	29	9	10*** Cancer	15	8	6	16
21	18	24	17	20	12 Public Health Infrastructure	11	9	11	10
17	18	12	16	21	13 Immunization & Infectious Diseases	11	16	12	9
16	24	14	6	20	14*** Injury & Violence Prevention	9	14	20	10
13	13	11	12	19	15 Family Planning	14	17	14	12
13	10	14	10	13	15 Environmental Health	16	14	14	15

^(a) Bold percentages identify priority areas that were significantly more likely to be chosen by some groups than by others.

[†] The top-ranked 16 Healthy People 2010 focus areas according to the average percentages (left side column) of each of four types of state and local rural health organizations selecting the focus areas as one of their top five rural health priorities.

*** Chi Square statistically significant at p<.001; or ** at p<.01; or * at p<.05.

scanning for resources was guided by the nine criteria initially established for selecting rural health priorities for study; an initial, though not exclusive, focus on literature appearing from 1990 and later; and literature focused on American rural health topics (apart from some on basic medical studies). The research literature considered around each of the rural health priorities extends through 2001 and part of, if not all, of 2002. In a couple of instances, work from early 2003 was added.

Two of the top 12 ranked rural health priorities were excluded from consideration in this first round of work—Educational and Community-Based Programs, and Public Health Infrastructure. Initial exploration of these two focus areas revealed a relative paucity of literature providing direct rural and urban comparison of such programs and infrastructures, and difficulty in matching treatment of these topics to the criteria used in researching and reporting the literature reviews. The team recognized, too, that a number of illustrations related to these two topics would be reflected in the models for practice targeting the other focus areas addressed in this volume.

At the same time, objectives within the focus area, access to quality health services, were found to be too diverse to be treated effectively in a single review. Three separate literature reviews appear under this heading—access to insurance, access to primary care, and access to emergency medical services.

Discussion turns now to a brief introduction of each of the 12 areas, drawing on information related to the initial criteria employed in assessing rural health priorities.

Rural Healthy People 2010 Areas Addressed

Access to insurance to support health care continues to be a problem in rural areas—a problem associated with a lower paid workforce reliant upon small employers that are less likely than larger employers to offer health insurance.¹⁷ Although there are some regional variations, the percentages of persons under 65 who are uninsured are higher in rural areas and

large central metropolitan counties than in fringe counties in large metropolitan areas or in small metropolitan counties.¹ Insurance is a major factor in assuring “access to health care,” one of the 10 “leading health indicators” selected through a process led by an interagency workgroup within the U.S. Department of Health and Human Services.⁹ Access to health insurance is named by over one-quarter of national and state experts as a rural health priority.¹⁰ This topic is included within the HP2010 focus area of Access to Quality Health Services, which is the HP2010 focus area most frequently selected as a rural health priority in a survey of state and local rural health leaders.¹³

Access to primary care remains a major concern in many rural areas across the nation. There is a lower supply of all types of physicians, except family practitioners and general practitioners, in rural areas in all four regions of the nation.¹ Access to timely and effective primary care is deemed critical to avoiding hospitalizations for ambulatory care sensitive conditions. “Access to health care” is one of the 10 “leading health indicators” selected through a process led by an interagency workgroup within the U.S. Department of Health and Human Services.⁹ Health manpower shortages and recruitment and retention of primary care providers are identified as major rural health concerns among state offices of rural health.³ Nearly 30 percent and nearly one-quarter of national and state rural health experts name access to health workforce and/or access to primary care, respectively, as rural health priorities.¹⁰ This topic is included within the HP2010 focus area of Access to Quality Health Services, which is the HP2010 focus area most frequently selected as a rural health priority in a survey of state and local rural health leaders.¹³

Access to emergency medical services (EMS) from first responders to ambulance and trauma services continue to be problematic in many rural settings. Access to EMS is identified as a major rural health concern among state offices of rural health.³ Emergency services is the third most often named rural health priority (after mental health and oral health) in a survey of national and state rural health experts invited to state such priorities in their own

words.¹⁰ This topic is included within the HP2010 focus area of Access to Quality Health Services, which is the HP2010 focus area most frequently selected as a rural health priority in a survey of state and local rural health leaders.¹³

Heart and stroke, especially heart disease, continues to be a very serious illness across the country. “Diseases of the heart” ranks first among the leading causes of death in 1999.¹¹ Stroke is the third ranking leading cause of death in 1999.¹¹ Heart diseases are the most frequently first-listed diagnoses for hospital discharges nationally.⁶ “Heart failure and shock” is the most frequent diagnostic category among hospitalized rural elderly Medicare beneficiaries.⁴ This point is all the more important in light of the fact that congestive heart failure, hypertension, and angina are “ambulatory-care-sensitive” conditions that can result in hospitalizations because of the lack of timely and effective primary care and preventive services.⁸ Heart disease and stroke is in a virtual tie with diabetes as the second-most frequently selected rural health priority in a survey of state and local rural health leaders.¹³

Diabetes mellitus is the sixth ranking leading cause of death in 1999¹¹ and is characterized frequently as an “epidemic.” Diabetes is an “ambulatory-care-sensitive” condition for which hospitalizations can often be avoided with timely and effective primary care and preventive services.⁸ Diabetes was named by over one-quarter of national and state experts as a rural health priority.¹⁰ This illness is in a virtual tie for second place with the area of heart disease and stroke as the HP2010 focus area most frequently selected as a rural health priority in a survey of state and local rural health leaders.¹³

Mental health and mental disorders is another HP2010 focus area widely recognized as a pressing rural health priority. Mental health is one of the 10 “leading health indicators” selected through a process led by an interagency workgroup within the U.S. Department of Health and Human Services.⁹ The suicide rate among rural males is higher than among their urban counterparts across all four regions of the nation.¹ Psychoses are a diagnostic

area virtually tied with cancer as the fourth most frequently first-listed diagnoses for hospital discharges nationally.⁶ Access to mental health services and concerns for suicide, stress, depression, and anxiety disorders were identified as major rural health concerns among state offices of rural health.³ Mental health is named by nearly 50 percent of national and state experts as a rural health priority behind access to health care.¹⁰ A survey of state and local rural health leaders finds mental health and mental disorders to be the fourth most often identified rural health priority.¹⁴

Oral health is increasingly recognized as a serious rural health problem. Nationally, rural areas record higher rates of people 65 and older with total tooth loss than do their urban counterparts. Among the four regions, only in the Midwest is this rural rate exceeded by the small metropolitan counties.¹ Shortages of dentists are more common in rural areas in all four regions of the country.¹ Dental care, as measured by dental visits within the past year, tends to be lower among 18–64 year-old people in rural areas than in urban areas across all four regions of the country.¹ Dental conditions, too, are identified as “ambulatory-care-sensitive conditions.”⁸ Dental shortages are identified as major rural health concerns among state offices of rural health.³ Oral health is named by over 50 percent of national and state experts as a rural health priority behind access to health care and mental health.¹⁰ Oral health is the fifth ranking rural health priority in a survey of state and local rural health leaders.¹³

Tobacco use is a practice that continues to disproportionately plague rural people. It is one of the 10 “leading health indicators” selected through a process led by an interagency workgroup within the U.S. Department of Health and Human Services.⁹ Rural adolescents (except in the Midwest) are more likely than their urban counterparts to smoke.¹ Adult men and women in the most rural counties, with some variation across regions, are more likely to smoke than those in urban counties.¹ Tobacco use holds the dubious distinction of being ranked as the leading “actual cause of death” in the United States, i.e., contributing to the diagnosed condition associated with a death.⁷ Tobacco use is in a virtual

tie for sixth place (with three other topics) among HP2010 focus areas most frequently selected as a rural health priority in a survey of state and local rural health leaders.¹³

Substance abuse, including alcohol use, is common in many rural areas of the country. Alcohol has been ranked as the third leading “actual causes of death” in the United States, i.e., contributing to the diagnosed condition associated with a death.⁷ Illicit use of drugs has been ranked as the ninth leading “actual cause of death” in the United States.⁷ Substance abuse is one of the 10 “leading health indicators” selected through a process led by an interagency workgroup within the U.S. Department of Health and Human Services.⁹ Access to mental health and behavioral health services, including substance abuse, were identified as major rural health concerns among state offices of rural health.³ Substance abuse is in a virtual tie for sixth place (with three other topics) among HP2010 focus areas most frequently selected as a rural health priority in a survey of state and local rural health leaders.¹³

Maternal, infant, and child health are significant challenges in many rural areas. Infant mortality is higher in rural areas in the South and Western regions.¹ Adolescent mortality is higher in rural areas in all four regions of the country.¹ The focus area, maternal, infant, and child health, is in a virtual tie for sixth place (with three other topics) among HP2010 focus areas most frequently selected as a rural health priority in a survey of state and local rural health leaders.¹³

Nutrition and overweight is a HP2010 focus area that is increasingly recognized as a serious problem in many rural areas across the nation. Rural areas exhibit higher self-reported rates of adult obesity than urban areas, but there is considerable variation among men and women in urban and rural areas across regions.¹ Diet and activity patterns have been ranked second only to tobacco as the leading “actual causes of death” in the United States, i.e., contributing to the diagnosed condition associated with a death.⁷ Nutritional disorders with complications and comorbidities are the ninth most frequent diagnostic category among hospitalized

rural elderly Medicare beneficiaries.⁴ Overweight and obesity are one of the 10 “leading health indicators” selected through a process led by an interagency workgroup within the U.S. Department of Health and Human Services.⁹ Nutrition and overweight is in a virtual tie for 10th place (with two other topics) among HP2010 focus areas most frequently selected as a rural health priority in a survey of state and local rural health leaders.¹³

Cancer is the second leading cause of death in 1999.¹¹ Cancer and psychoses are virtually tied as the fourth most frequently first-listed diagnoses for hospital discharges nationally.⁶ Cancer is in a virtual tie for 10th place (with two other topics) among HP2010 focus areas most frequently selected as a rural health priority in a survey of state and local rural health leaders.¹³

Further Consideration of Rural Priorities

The emphasis in this work on rural health priority areas is not meant to imply that other HP2010 focus areas are not important in rural America. In fact, two additional focus areas and associated models for practice are currently under study for release in the Fall of 2003. The research on priorities was driven in large part to guide the RHP2010 team in ordering the work that it has pursued in this project. Drawing on the state and local rural health leaders’ survey, the team identified focus areas that are most salient to state rural health leaders and leaders of local rural public health agencies, hospitals, and rural health centers and clinics. The consideration of objective data associated with the other criteria considered in selecting HP2010 areas to address in the initial phase of RHP2010 tends to reinforce the survey results. This does not make any of the HP2010 focus areas a higher priority in rural areas than another in any absolute sense. What it may suggest is that proponents of some health issues may need to employ additional effort to draw state and local health leaders’ attention to their concerns. At the same time, HP2010 draws attention to these additional topics, as will RHP2010 as it progresses.

Survey results reported in Table 4 suggest that, for a few of these priorities, one or two groups of rural

health leaders may champion these concerns within rural communities. For other HP2010 focus areas, however, fairly substantial support is reflected across all leader groups: e.g., for areas such as substance abuse, and maternal, infant, and child health.

Fewer significant differences in rural health priorities were noted across regions than across types of respondents. Nonetheless, for some HP2010 focus areas, differences in ratings by types of organization or by region might recommend latitude within rural health policies that allow rural stakeholders to tailor rural health initiatives to certain regional needs or organizational circumstances. Some recognition of unique demands posed in particular regions, for example, is reflected in federally funded or foundation-funded efforts targeting Southern states, frontier regions, border regions, the Appalachian region, and the like.

For those focus areas where there are differences among the four groups of rural health leaders, such differences might reveal strengths in addressing top priorities in a collective fashion. For example, the priority emphasis placed upon chronic diseases such as heart disease and diabetes by rural hospitals and rural health clinics/centers is quite congruent with the emphasis of public health agencies upon tobacco use and nutrition and overweight. The organizations may be addressing the “same” problem at different points of intervention. These rural health stakeholder groups reflect different perspectives, skills, strategies, and points of contact with rural patients, clients, and populations.

Such differences in rural priorities across types of rural leaders may argue in favor of cross-cutting health organizations, coordinating bodies, or associations at state and local levels that can ensure attention to the multiple health priorities facing rural communities. Substantial agreement combined with selective differences on rural health priorities among rural health leaders may be viewed as strengths and ones that can best be optimized by a variety of health professionals and organizations coordinating their efforts on many of these priorities. *Rural Healthy People 2010: A Companion Document to Healthy People 2010* presents dozens of models for practice

related to many rural health priorities that reflect just such coordination.

MODELS FOR PRACTICE IN RURAL HEALTHY PEOPLE 2010

A major goal of the Rural Healthy People 2010 project is to offer guidance to states, communities, health organizations, and professionals on how these rural health priorities might be attacked. The approach taken here was to look at what has worked in other settings, analyze key components of such efforts, summarize the particular approaches against a standard set of criteria, and provide a contact person for interested parties to reach for more information.

The first step was to define the set of initiatives or programs we wanted to examine. The terms “best practices” and “model programs” were most often used as a general reference to identify the type of programs and practices considered relevant to this study. We researched these and related concepts to help identify criteria for selecting specific practices or programs we would identify, analyze, and share with others.

Best practices traces its lineage back to “benchmarking,” typically wherein some organizations identify “benchmark” organizations to which they aspire and attempt to discover and replicate those practices that appear to account for exceptional performance. Best practices has also come to be associated with performance of professionals and programs, often in association with “evidence-based” successful outcomes. Some of the definitions and attributes we have found to be associated with “best practices” are the following:

- a technique or methodology that, through experience and research, has proven to reliably lead to a desired result;
- fully implemented programs, benchmarked and tested, that demonstrate significant improvement (in processes or outcomes);
- intervention strategies that have been successfully:

- ◆ replicated one or more times and consistently produced positive results, or
- ◆ implemented in different settings, and/or with different populations, and/or across a variety of different problems with positive results.

Model programs is a term that has been employed widely in governmental and nonprofit organizations (especially in health and human services) to characterize organized efforts, frequently in the form of formal programs, that demonstrate success over a period of time. Review of the use of this term found the following characteristics associated with the term “model programs”:

- innovative,
- problem-based,
- coordinate organizations and services,
- combine various approaches,
- new technologies,
- new application of an existing technology,
- represent radical changes to existing practices,
- may or may not be theory based, and
- experimental and subject to testing.

Criteria: Models for Practice (MFP)

Conceptual elements from both model programs (MP) and from best practices (BP) were weighed against the purpose of the Rural Healthy People 2010 project and the predominantly public health and community health perspective sought from our team (RHP). From this deliberation, the following criteria were developed to guide the selection and analysis of what we call “models for practice”:

- located in or serves rural area (RHP),
- addresses one or more of the high-priority rural health focus areas (RHP),
- community-based (RHP),
- local or regional (RHP),

- clear stakeholders and partners (RHP),
- formal structure (RHP),
- continuity (in place three years or longer) (MP),
- growth (serves more people, larger region, addresses more conditions) (MP),
- movement from pilot mode to full implementation (MP),
- evidence of increased commitment from original stakeholders (MP),
- buy-in by additional stakeholders (MP),
- financial stability (MP),
- positive outcomes (MP, BP),
- replicable across settings (BP),
- breadth of applications (BP),
- dissemination of method/technique (BP), and
- recognition in regulatory and/or funding guidelines (BP).

Ultimately, these criteria were reflected in a very brief “screening survey” that was used to interview MFP nominee spokespersons, in a more detailed survey (executed by phone, e-mail, or mail delivery) for those MFPs that were screened into a pool of potential candidates, and in the four broad topic areas around which each of the selected MFPs is summarized.

Folding MFP criteria into each MFP summary begins with a “Snapshot” that captures the location and priority area addressed along with a brief description of its activity. This is followed by the “Model” section that is organized around four topic areas. The “Blueprint” describes the focus, location, structure, stakeholders, and activities characterizing the model. The “Making a Difference” section addresses in more detail the activities and outcomes flowing from the model. The “Beginnings” section describes the roots and initiation of the model and its initial growth. Finally, the “Challenges and Solutions” section examines such things as barriers and/or opportunities encountered, strategies for

addressing them, and implications for continuity or growth of the MFP.

Identifying Models for Practice

Three principal methods were employed to identify MFPs: a request for nominations for national, state, and local rural health leaders who responded to the RHP2010 survey; contacting professional associations and foundations for nominations; and examining the rural health literature for featured models.

The respondents to the Rural Healthy People 2010 survey nominated over 250 MFPs. In addition, professional associations, foundations, and other individuals identified several dozen MFPs. Over a dozen were encountered in literature reviews or in newsletters and trade journals. Altogether, over 300 MFPs nominations were considered.

Eventually, we examined the "Models that Work" from the Bureau of Primary Health Care to identify one or two models in a couple of rural health priority areas where we had not found enough solid candidate models. Although some of our MFPs turned out to have received one of HRSA's Community Access Program (CAP) grant awards, we did not go to the list of awardees to draw MFPs. These are good sources, to be sure, but we did not wish to duplicate models or otherwise over-rely on those that were already recognized and widely publicized.

For each of the RHP2010 priority areas reviewed in the companion document, three or four MFPs illustrating how some rural areas are addressing these challenges are typically presented for each priority area in the printed copies of RHP2010. Additional Models for Practice appear in the web version of RHP2010.

Some programs have been in place for longer periods of time than others and therefore, are able to share more information allowing the presentation of a more detailed description of the program. It should be noted, too, that the RHP2010 document and website do not include an exhaustive listing of

MFPs. Some additional models are being considered for inclusion under two other RHP2010 focus areas that will be added to our website in Fall 2003. Still others are associated with focus areas to be added after that. Some sites that are currently listed MFPs under one priority area are engaged in other MFP-caliber programs addressing other focus areas. Finally, we anticipate that the publication of RHP2010 will encourage the nomination of still other excellent MFPs. The current group of MFPs, of course, covers a wide range of topics, approaches, and geographic areas of the country.

The MFPs can be differentiated along a number of dimensions:

- sponsorship: single organization vs. multiple organizations;
- sector: government, nonprofit, or for-profit vs. multi-sector;
- rural to urban: rural only vs. urban-anchored initiative serving rural region;
- illness targeting: single illness vs. multiple health conditions;
- age targeted: children/youth vs. elderly;
- health system dimensions: formal care providers vs. community health;
- geographic scope: single community vs. multi-state regional;
- degree of institutionalization: active for many years vs. a few years; and
- major barriers identified: transportation, attitudinal-cultural.

One or two of the MFPs considered in this volume are clearly viewed as temporary or transitory interventions that are intended to meet a need until a preferred, longer term solution is attained.

OTHER SOURCES OF INNOVATIVE MODELS

A number of best practices in public health at the state level are published by the Assistant Secretary for Health in the U.S. Department of Health and

Human Services, addressing one or more of the Healthy People 2010 objectives (<http://www.osophs.dhhs.gov/ophs/BestPractice>).

Other models related to HP2010 objectives can be found at the Bureau of Primary Health Care website focused on “Models that Work.” Recent winners of that designation can be found at their website (<http://bphc.hrsa.gov/mtw/>).

Information on dozens of rural outreach grant recipients of funding from the U.S. Office of Rural Health Policy from 1994 to the current year may be another source of information on promising programs (<http://ruralhealth.hrsa.gov/funding/outreach.htm>).

The Community Access Program of the Bureau of Primary Health Care provides grant support to networks of organizations intending to improve services to the uninsured and underinsured. The past three years’ grantee recipients, a number of them rural focused, are identified on the CAP website (<http://bphc.hrsa.gov/cap>).

DATA AND DATA SOURCES FOR RHP2010

Data and data sources for many HP2010 objectives, and rural-urban comparisons, in some instances, can be found in HP2010 documents. The documents can be found at the Healthy People 2010 website (<http://www.healthypeople.gov>).

CDC Wonder is a web-based information resource that enables the user to access a wide variety of Healthy People 2010-related data. It has a specific page that is devoted to a Healthy People 2010 database that can be searched by HP2010 focus area or objective. It includes a wide range of public health data and information resources addressing other topics, as well, at national, state, and, in many instances, county level (CDC Wonder, <http://wonder.cdc.gov> and <http://wonder.cdc.gov/data2010>).

The Urban and Rural Health Chartbook (Eberhardt, et al., 2001)¹ cited frequently in this volume provides urban and rural comparisons nationally and across

the four census regions for information related to many of the rural health priorities discussed in this document. This resource can also be found at the National Center for Health Statistics website (<http://www.cdc.gov/nchs>).

Data on ambulatory care sensitive conditions may be available from state agencies in some states that collect hospital discharge (admissions) data, including diagnosis-related data that may be captured and reported by facility, zip code, and/or county.

Rural Populations and Health Care Providers: A Map Book offers maps providing a visual picture of the geographic distribution of rural populations, the racial characteristics of rural populations, and the health care providers who serve rural populations. Among the rural providers mapped are primary care physicians (per 200 population), Critical Access Hospitals, Federally Qualified Health Centers, Rural Health Clinics, and Skilled Nursing Facilities.¹⁸ The Kaiser Family Foundation provides “state health facts online” at their website (<http://www.statehealthfacts.kff.org>).

The HRSA Community Health Status Indicators website was retired as of October 11, 2002. The website (<http://www.hrsa.gov/CHSINotice.htm>) recommends that interested parties contact the following sources:

- U.S. Census Bureau <http://www.census.gov>;
- National Center for Health Statistics <http://www.cdc.gov/nchs>; and
- State health departments, which may be a potential source for data by county.

The U.S. Census Bureau State and County Quick Facts can be found at the following website: <http://quickfacts.census.gov/qfd/states/48000.html>. For each state and its counties, it provides basic data on population (population size, age, ethnicity, education, home ownership, households and household size), income, poverty status, business/employer facts, employment, geographic area, and population density.

The Area Resource File (ARF) is a health resources information system containing more than 6,000 variables (including information over a number of years) for each of the nation's counties. It is designed to be used by planners, policymakers, researchers, and other professionals. It contains data on health professions, health facilities, populations, hospital utilization, and a variety of other subjects (<http://www.arfsys.com/main.htm>). ARF also identifies a number of more specific sources from which it gathers data. Although much of the ARF data are quite current, more recent data or additional data for some subjects may be available from other sources and/or within particular states.

In addition to state health department data, some states may have one or more "integrative databases" that draw on a number of sources related to many health and population-related topics. A very good example is the Landscape Project at the Texas Institute for Health Policy Research (<http://66.241.202.7/index.cfm>). It draws upon a number of federal and state government sources for its database, which enables the user to compare the counties in the state with one another or with all counties in the state. Among the topics included in Landscape are:

- communicable diseases,
- crime,
- environmental health,
- government finance,
- the health care sector,
- health insurance,
- household information,
- infant and maternal health,
- mortality statistics,
- needs-based programs,
- population projections,
- population distribution,

- Social Security, and
- socioeconomic characteristics.

These and other sources of information can be used to establish a baseline for a community regarding health conditions. Such information, along with patient, client, and student information from local organizations can be employed (subject to privacy restrictions) to evaluate progress resulting from interventions. The following overviews of the literature suggest some of the types of information that may be important. The overviews and models for practice are intended to be most useful in identifying problems, possible contributing factors and consequences, and organizations and communities that have taken important steps to address such problems.

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