Introduction and Background:

Rural Americans face disparities in health care when compared to residents of urban areas. Included among these disparities are the following:

- Rural populations have less access to health care providers. Although 25 percent of the U.S. population lives in rural areas, only 10 percent of the nation’s physicians practice in rural areas.¹
- Residents in the most rural communities have the fewest visits for dental care. Rural non-city areas average 30 dentists per 100,000 people versus 60 per 100,000 in urban areas.²
- Rural residents are less likely to have employer-provided health care coverage or prescription drug coverage, and the rural poor are less likely to be covered by Medicaid benefits than their urban counterparts.³

Rural healthcare facilities experience chronic shortages of virtually every type of healthcare provider – physicians, nurses, and allied health personnel. Health care professionals most likely to practice in rural areas include individuals who come from a rural background (i.e., who were raised, attended primary and secondary school, and/or attended college in a rural community). For example, the correlation between medical school admissions of rural born students and graduation of rural physicians of all types is +0.92.⁴

Such data implies that, to effectively address the chronic shortages of health care providers in rural communities, the United States must engage in practices and policy setting that results in more rural born students being trained in health professions. However, even when such students are identified, the social, educational and financial support needed for them to be successful in entering health careers is often weak or missing. The effort required to identify and support rural youth who wish to pursue careers in health care is substantial, but health professions jobs are significant economic drivers in rural communities and recruiting rural youth to health professions careers is a long-term economic investment.

Given the above facts and the persistent shortage of health care providers at all levels in rural communities, it is critical to maximize the number of kindergarten to 12th grade level youth in these communities that are informed about, choose to prepare for, and are successful in entering health professions training programs. To accomplish this goal, rural and frontier communities must mount and sustain effective programs to recruit young people to the health careers pipeline.

Accomplishing this in rural communities is made particularly difficult by the unique fiscal and program challenges facing rural school districts. Some of the challenges facing the 25 percent of U.S. schools and 14 percent of U.S. students located in rural areas include:
• All school districts must maintain a certain set of services no matter what the location – facilities, staff, transportation, food service. Unfortunately, it costs a small rural school much more per capita to provide these services than a larger school.

• Rural schools have a difficult time attracting and retaining quality teachers and administrators.

• Rural districts have difficulty offering advanced academic or vocational courses. Either the school doesn’t have enough instructors to teach such courses, or the cost of distance learning is prohibitive to the district.\(^6\) These challenges have recently been exacerbated by the impact of No Child Left Behind (NCLB) requirements that impose increased financial and other burdens, which are especially taxing for small rural schools with severely limited resources. In 2004, the Governmental Accountability Office identified a number of unique challenges for small rural schools in meeting NCLB standards and recommended that the Secretary of Education take additional steps to assist them with such challenges.\(^7\)

Faced with significant difficulties in meeting the day-to-day educational needs of their students, many rural school districts can find it virtually impossible to provide the extra resources needed to prepare students to pursue and succeed in health professions training programs. Rural communities will need additional support and assistance to move interested and capable young people into and through the health careers pipeline.

Success of pipeline efforts at the kindergarten to 12th grade level will depend on:
• Educational and informational factors
• Attitudinal and environmental factors
• Financial factors
• Programmatic factors

Issues:

1. Educational and informational factors

There must be adequate opportunities and resources in rural communities to prepare students for higher education during their elementary, middle and high school years. To offer such opportunities, rural schools and communities must have additional resources with which to assure:

a) Recruitment and retention of additional qualified teachers to provide courses that prepare students effectively for higher education.

b) Widespread availability of advanced math and science instruction and advanced placement coursework in preparation for higher education.

c) Universal access to broadband communications services and distance learning technology to supplement local educational resources.

d) Targeted programs that provide academic enrichment and mentoring for students interested in health care careers.

Health careers information and recruitment efforts must begin in elementary and middle schools. Career development theory and research indicate that children often begin as early as ages 6-8 to make choices, including “de-selecting” certain potential careers, that will significantly impact their future decision to pursue a specific career.\(^6,9\) Information and activities must be available in rural communities to raise student, teacher, counselor, and parent awareness of the wide variety of health careers, including awareness that health careers are available at various levels of education/training.

To effectively raise awareness of health care careers, rural communities must have available:

e) Resources and support for teachers and counselors that put at their disposal a wide breadth of information on health career options. Counselors may currently know about doctors and nurses but not about the wide range of other health professions.

f) Programs targeted at teachers, counselors, students, and parents to build a positive image of health careers.
g) Programs targeted at teachers and counselors to build interest in channeling appropriate students into the pipeline.

h) Health careers information materials and resources tailored to appeal to specific age groups.

i) Adequate teaching resources for rural secondary school science and math teachers to enable them to prepare rural students to compete for health profession programs that have limited enrollment.

j) Co-curricular opportunities that enable students to learn about health careers, including active involvement of community-based health professionals, that do not place significant additional burdens on teachers and counselors – e.g., health careers clubs, Explorer programs, etc.

k) Information and support to enable parents to plan effectively with their child to meet the educational and financial requirements of health career education.

2. Attitudinal and Environmental Factors

In some rural/frontier communities, the image of health careers may not be as appealing as other opportunities. Frequently, this negative image is reinforced by media portrayals of the health professions.

This negative image may include:

- Perception of long hours, poor pay, and poor working conditions.
- Negative attitudes expressed by practicing health care providers.
- Impression that health careers are filled with health hazards and unappealing tasks.
- Negative media portrayal and/or negative counselor, teacher, or parental attitudes.
- Perception that training takes too long and is too difficult.

In order to increase the numbers of rural students entering health professions, there must be programs that develop and maintain the interest of rural youth in health careers, present positive images of the health professions, and foster belief that such a career is attainable. Successful programs will also recognize and respond to the increasing racial/ethnic diversity in rural communities with initiatives that address the cultural and linguistic barriers to health career choices and decrease gender and ethnic/racial stereotypes that remain for many health professions. In addition, programs should build parental and peer support for a student’s decision to pursue a health career.

3. Financial Factors

Rural residents tend to be poorer than urban residents, and rural students frequently face financial barriers when considering education for a healthcare career. These barriers may discourage the students and their parents from active pursuit of such a career.

Rural school districts will require added federal, state, and local financial support to initiate and maintain educational and co-curricular programs that encourage and better equip students to pursue higher education and health professions training.

Rural communities will need to develop local financial resources to support interested youth from the community in pursuing health professions training and provide adequate information to parents and students about other funding sources that can assist them, not only with educational costs, but also with living expenses for socio-economically disadvantaged students during training.

4. Programmatic Factors

In order to encourage rural students to enter health professions, longitudinal career information, recruitment, and preparation programs should be available. These programs should provide consistent support to students through various stages of career selection/development with:

a) Participation of adequate numbers of diverse health professional role models with a commitment to practicing in rural communities – often difficult because of shortage of providers in such communities.

b) Adequate number and duration of job shadowing and service learning opportunities — often complicated by HIPAA concerns and provider shortages.
c) Continuous involvement by local health care employers in the community with significant community support of the programs and the students.
d) Coordinated in school and out of school activities that foster student interest in science, math and health care.
e) Consistent data gathering and tracking of student achievement to measure and document outcomes.

Federal, state, and local programs focused on interesting youth in health careers and preparing them to enter training for such careers should be coordinated. These programs should:
f) Foster collaboration, and where appropriate, consolidation, among multiple agencies and multiple programs within single agencies funded to do similar activities – e.g., Department of Labor (Employment and Training Administration, Jobs Corps, Workforce Investment Act, High Growth Jobs Initiative), HHS (Titles VII and VIII, National Health Service Corps, Indian Health Service, Kids into Health Careers), Department of Education, health professions organizations and trade groups - to increase efficiency and effectiveness.

Adequate numbers of student positions in post-secondary health professions and pre-professional education programs should be available (community college, undergraduate school, professional school) to accommodate qualified rural students recruited through the kindergarten to 12th grade level health professions pipeline. To assure adequacy, there must be:
g) Funding for expansion of rural, community-based health professions training programs.
h) Increased support for development of faculty in disciplines where faculty shortages exist (e.g., nursing).
i) Formal agreements between post-secondary educational institutions and community-based pipeline programs to provide early and preferred admissions to community colleges and undergraduate schools for students successfully completing kindergarten to 12th grade level health careers pipeline programs.
j) Educational programs that provide flexibility to meet the educational and financing needs of rural students.
k) Career ladders that allow students who choose to do so to acquire entry-level training and progress by stages in a career while maintaining gainful employment in the healthcare industry.

Recommendations:

In support of the development and maintenance of effective community-based kindergarten to 12th grade level health careers recruitment programs in rural communities, NRHA pledges to increase its involvement in collaborative efforts with national and state health professions organizations to encourage existing practitioners or those in training to reach out to youth in rural communities to assist them in becoming the next generation of rural health care practitioners.

Further, the NRHA supports:

• Adequate state and federal education funding that will allow rural primary and secondary schools to provide a “level playing field” of educational opportunities that will enable their students to effectively prepare for entry into health career training programs. Emphasis must be placed on increasing student interest in the health professions coupled with increasing their science and math competencies beginning in the elementary grades.

• Federal and state funding and regulatory policies that will assure universal availability and increased use of broadband communications and distance learning technologies in rural school systems.

• Reauthorization and increased funding of Titles VII and VIII health professions programs and School to Work programs that focus on recruiting rural youth to health careers.

• Establishment of a federal interagency task group including, but not necessarily limited to, representatives of the Departments of Health and Human Services, Education, and Labor to identify the various federal programs providing support for recruitment of
youth to health care careers and recommend agency and Congressional approaches to foster collaboration among programs, minimize duplication, and improve efficiency, including potentials for program consolidation.

- Establishment of federally-supported research and data collection for evaluation of rural health professions training programs and models and to develop more effective ways to encourage rural students to enter health professions.
- Establishment of a clearinghouse to promote collection and sharing of information, programs, and best practices in recruitment of youth, including rural youth, into the health careers pipeline. This clearinghouse should also be charged with developing and disseminating a toolkit and initiative to assist communities in establishing locally funded and supported health careers development programs that can support local youth to return to the community after completing health professional training.
- Expansion of federal and state-supported higher education financing and payment mechanisms to assist financially disadvantaged students from rural communities pursuing a health career, including grants, scholarships, stipends, service-linked forgivable loans, tuition fee waivers, etc.
- Preferences in federal funding of programs addressing youth recruitment to health care careers that have the following attributes:
  - Demonstrate innovative approaches to career awareness programs in rural and frontier communities.
  - Include evidence of professional school linkages with rural populations as part of the program.
  - Include longitudinal consistent programs to support interested and promising students throughout their pre-college careers.
  - Include longitudinal tracking of youth program participants that demonstrates retention of youth in pipeline programs and success in student enrollment in health professions training programs.
- Increased federal and state support for community-based health professions training programs at all levels that provide training for students from rural communities. This should include funding and programmatic support for:
  - Faculty development;
  - Program expansion in underserved areas;
  - Establishment of career ladders to encourage progression of rural providers to higher levels of training.
- Inclusion of rural health career recruitment programs as a priority area for support in rural economic development programs of USDA, Cooperative Extension, and related federal and state economic development programs.

**Summary:**

In rural communities, health professions jobs are significant economic drivers and recruiting rural youth to health professional careers is a long-term economic investment. Health care professionals most likely to live and work in rural areas include those individuals who originate from rural areas. Therefore, rural and frontier communities, with the support of federal and state policies and funding mechanisms, must mount and sustain effective programs to recruit young people to the health careers pipeline. Success of efforts at the kindergarten through 12th grade level will depend on several factors, including increasing the availability of educational and informational opportunities, and overcoming attitudinal and environmental limitations and financial and programmatic constraints.

Maximizing the number of kindergarten to 12th grade level youth in rural communities who are informed about, choose to prepare for, and are successful in entering health professions training programs is a goal that can be achieved through effective rural, community-based kindergarten to 12th grade level health careers recruitment programs. State and federal policies must support leveling the playing field of educational opportunities in rural primary
and secondary schools, including broadband communications and distance learning technologies; increasing federal funding for programs that focus on recruiting rural youth to health careers and expanding federal and state-supported higher education financing; creating incentives for rural practitioners to reach out to rural youth to support them as the next generation of practitioners; providing support for community-based health professions training programs; and expanding rural economic development programs to include health career recruitment.

End Notes
1 National Rural Health Association website, www.nrharural.org/about/sub/different.html
3 Rural Healthy People 2010, www.srph.tamhsc.edu/centers/rhp2010/default.htm
4 Personal communication, Robert Bowman, M.D.
10 National Rural Health Association website, www.NRHA.rural.org/about/sub/different.html