HAPPY HOLIDAYS from all of us, Fred, Gerald and Cheryl, at the National Center for Rural Health Works!!! The National Center for Rural Health Works will share the following activities:

- **2012-2013 Past Year Projects**
  - Economic Impact of a Typical Rural Primary Care Physician
  - Emergency Medical Services (EMS) Systems Development and Budget Generator Guidebook

- **2013-2014 New Work Projects**
  - Finish Emergency Medical Services (EMS) Systems Development and Budget Generator Guidebook
  - Economic Impact of a Rural Nursing Home
  - Economic Impact of Nurse Practitioners and Physician Assistants

- **RHW Workshops**
  - Workshop in Denver, Colorado, August 15, 2013
  - Workshop in St. George, Utah, March 12, 2013
  - Sign up now for a workshop in Sacramento, California, on January 29, 2014. Workshop is hosted by the California Office of Rural Health. Check our website for the workshop flyer: [http://ruralhealthworks.org/workshops/](http://ruralhealthworks.org/workshops/)
  - Additional workshops may be held in Texas, Kentucky, Tennessee, or Florida later in 2014. Watch your email!

**2012-2013 Past Year Projects**

**Economic Impact of a Typical Rural Primary Care Physician**

A primary care physician in rural areas provides needed medical services. An estimated 55.5 percent of all physician visits are made to primary care physicians or mid-level practitioners such as physician assistants or nurse practitioners. Historically, a physician in an independently-owned clinic was the typical delivery method for rural primary care services. In recent years the independent practice model is moving toward an employment model. Fewer primary care physician graduates are starting their own practices and many practicing physicians are opting for employment. The increase of hospital-owned clinics, community health centers and corporate-owned urgent care clinics has created new employment opportunities.

Availability of adequate primary care services is essential for a strong health care system, but these primary care visits also account for health expenditures in the form of revenues to the medical clinic. A large portion of the revenues create employment opportunities and wages, salaries and benefits for clinical staff, which in turn are returned to the local economy as the clinic and employees spend locally. Furthermore, the total economic impact of a primary care
The physician is greater than the impact at the clinic when the community has a local hospital. The physician contributes to the local hospital through inpatient admissions and outpatient referrals. Not only is the support vital for maintaining sufficient hospital utilization, but the revenue generated at the hospital creates even more jobs and income.

The secondary impacts are calculated with an input-output model and data from IMPLAN. A multiplier from an input-output model not only measures the economic activity from the physician and hospital employees but also includes the economic activity from additional business spending and household spending such as the restaurant workers, equipment vendors and others. The model calculates region-specific employment (in terms of full- and part-time jobs) and labor income (in terms of wages, salaries and benefits) multipliers.

The lack of available data requires that some assumptions be made. Hospitals allocate a significant portion of their revenues to employee compensation costs. Therefore, it was assumed that the direct impacts could be estimated by allocating the total hospital compensation equally to the primary care physicians practicing in the hospital medical service area. Hospital employment and income data for 30 rural hospitals located in 12 different states, along with the total number of primary care providers in each hospital service area, were averaged to estimate the direct impacts of each physician to the hospital. Many of these hospitals were Critical Access Hospitals. Due to differences in regulations among states, the patient activity for mid-level practitioners varies significantly. For this study, it was assumed that a mid-level practitioner was comparable to one-half of a primary care physician. It may take three to five years before a new physician practice is at full capacity and can generate a full impact on the community. Actual impacts on the hospital may be affected by their available capacity.

<table>
<thead>
<tr>
<th>Employment</th>
<th>Direct Impact</th>
<th>Total Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinic</td>
<td>4.0</td>
<td>5.3</td>
</tr>
<tr>
<td>Hospital</td>
<td>13.5</td>
<td>18.9</td>
</tr>
<tr>
<td>TOTAL</td>
<td>17.5</td>
<td>24.2</td>
</tr>
<tr>
<td>Income†</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinic</td>
<td>$395,024</td>
<td>$470,079</td>
</tr>
<tr>
<td>Hospital</td>
<td>$704,444</td>
<td>$880,555</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$1,099,468</td>
<td>$1,350,634</td>
</tr>
</tbody>
</table>

†Income includes wages, salaries and benefits and physician net earnings

This report documents the economic importance of a rural physician. A rural primary care physician practicing in a community with a local hospital creates approximately 24.2 local jobs and over $1.3 million in labor income (wages, salaries and benefits). The estimate is low as this study measures only the impacts from the clinic and hospital and does not include impacts from pharmacy, nursing home, etc. The impact is created through clinic employment, inpatient admissions, outpatient referrals and the multiplier effect of these activities. Thus, the rural primary care physician's economic contributions are important to a community.
**Emergency Medical Services (EMS) Systems Development and Budget Generator Guidebook**

Many systems around the nation are facing serious financial stress. A guidebook is needed that discusses options for additional revenues and/or cost savings. The end result will be an EMS guidebook which will enable decision-makers to estimate costs and revenues for alternative EMS systems. A budget generator will be available in Excel. The National Center will be working with several RHW Advisory Council Members on this project:

- Tom Harris, Professor, State Extension Specialist, and Director of the University Center for Economic Development at the University of Nevada, Reno
- John Packham, Nevada Office of Rural Health at the University of Nevada School of Medicine
- Karlene Andreola, EMS Coordinator, Nevada, UNSOM Outreach Center
- Rod Hargrave, Flex Program Coordinator and EMS Special Projects Coordinator, Oklahoma Office of Rural Health
- Dale Adkerson, EMS Director, Emergency Systems, Oklahoma State Department of Health
- Lisa Davis, Director, Pennsylvania Office of Rural Health
- Thomas Nehring, Director, ND Department of Health, Division of EMS and Trauma
- Gary L. Wingrove, Director of Government Relations and Strategic Affairs, Gold Cross/Mayo Clinic Medical Transport in Minnesota, President of the Center for Leadership, Innovation and Research in EMS, Chair of the International Roundtable on Community Paramedicine, and Advisor for the National Medicare Rural Hospital Flexibility Grant Program Technical Assistance Center
- Stephanie Hansen, Education & Services Director, National Organization of State Offices of Rural Health and Coordinator of the NOSORH EMS Committee
- Gabriela Boscan, Manager, Program Services, National Rural Health Association
- Bridget Ware, Project Officer, Office of Rural Health Policy, Health Resources and Services Administration, U.S. Department of Health and Human Services

Other EMS officials have been invited to provide counsel and assistance on the guidebook. The guidebook was planned for the 2012-2013 work plan; however, the CHNA Template dominated the work activities and this study will be completed in the 2013-2014 project year. See more information on this in the New Work Projects below

**2012-2013 NEW WORK PROJECTS**

**Emergency Medical Services (EMS) Systems Development and Budget Generator Guidebook**

The EMS Systems Development and Budget Generator Guidebook took much longer than expected. The project took some different twists on how to develop the budget generator, which delayed the results a bit, and is now ready for review and for testing the Budget Generator.

The budget generator is available in an Excel spreadsheet. The budget generator will be provided on a CD in the back of the Guidebook or it can be downloaded from the website: www.ruralhealthworks.org.

There are two ways to use the example budget template. The first method is to modify the parameters worksheet and the final budget will automatically be updated and build your budget.
The second way that an EMS system can use the budget template is to utilize the worksheet, BUILD YOUR OWN. This worksheet has been provided for EMS systems to input their actual or estimated expenses and revenues. This spreadsheet is not attached to any budget parameters. Each EMS system can determine their own parameters and assumptions and each EMS system can change any of the categories of expenses or revenues.

The budget analyses, utilizing the budget generator, can be provided for a single EMS provider or for multiple EMS providers considering regional budgeting alternatives. The budget spreadsheet is designed to be used for many different scenarios.

In summary, the EMS Systems Development and Budget Generator Guidebook has taken much longer than expected but will soon be available and should be extremely useful to rural EMS systems.

**Economic Impact of a Rural Nursing Home**

**Background:** Nursing homes are one of the health sectors’ largest employers in rural communities. The local hospital may be the only health care entity with more employment in a rural community. Nursing homes may be one of the top five employers in a rural community and, therefore, are important employers in the local economy. Not only are nursing homes one of the larger employers in a rural community, but the services that nursing homes provide for the elderly and disabled are extremely necessary to the rural community. The elderly and disabled need a safe and affordable environment to live as they become less and less proficient in the activities of daily living (ADLs). Nursing homes allow the elderly and disabled to continue to live in the rural community, to spend their personal income in the local economy, and to remain close to family, friends, and community.

In many rural areas, the rural demographics are changing and indicate not only a larger percentage of elderly (65+), but also a much larger absolute number of elderly. Many critical access hospitals (CAHs) have nursing homes on their campuses and, if not, CAHs work closely with the rural nursing homes. With the changing health environment, there is concern whether CAHs and other rural hospitals will be able to continue to provide nursing homes in the future. The survival of nursing homes in rural communities is important to the local economy, as well as important for the elderly and disabled to have nursing home availability so they can remain in their home community.

**Objective:** The objective of this study is to review state and federal regulations governing nursing homes, to review trends in nursing home care in rural communities, and to provide a template to illustrate the economic impact of a typical rural nursing home.

**Economic Impact of Nurse Practitioners and Physician Assistants**

**Background:** Nurse Practitioners and Physician Assistants, commonly called mid-level practitioners, provide a portion of primary care, including rural communities. With the new legislative requirements, mid-level utilization is being encouraged to provide additional primary care.
In addition to providing critical health care, mid-level practitioners make economic contributions to rural communities. The regulations for mid-level practitioners vary across states. In particular, the number of mid-levels that a supervising physician can manage and the geographical distance allowed between mid-level and supervising physician also vary. From previous research, the daily patient visits for a mid-level practitioner had been considered one-half (50%) of that of a primary care physician. However, regulations continue to change and the daily patient visits provided by mid-levels appear to be increasing, thereby potentially increasing the economic impact of a typical nurse practitioner or physician assistant.

**Objective:** The study will also include a discussion of the changes in the training of mid-level practitioners in different states and the changes in physician oversight and the level of care provided. This project will develop a template to be utilized to show the impact a mid-level practitioner has on a community. The results could be used to give community organizations insight into the economic benefits to a community from providing tuition assistance for mid-level students that return to practice in that community.

**RHW WORKSHOPS**

*The National Center* held two regional training workshops in 2013:

- Workshop in Denver, Colorado, August 15, 2013
- Workshop in St. George, Utah, March 12, 2013

*The National Center* is planning two or three regional training workshops in 2014:

- January 29, 2014, in Sacramento, California, hosted by the California State Office of Rural Health. See our website for the details!
- Additional workshops may be scheduled in Texas, Florida, Kentucky, or Tennessee.

Anyone interested in hosting a RHW workshop in 2014 should contact *the National Center*. Workshop hosts are on a first to offer, first to host basis. The host state assists with locating a training facility and inviting state participants; they *incur no financial costs*. The benefit to a host state is having the workshop available for state participation (with a nominal registration fee per participant). Please share this information with anyone interested in hosting or attending a workshop.

*The National Center* invites any interested parties to register and attend these workshops. The workshops teach professionals how to conduct economic impact studies, how to fulfill CHNA requirements with the CHNA Template, how to assess rural health needs, and how to develop health feasibility (budget) studies. *The National Center* also has additional information on the workshop topic areas on their website: [www.ruralhealthworks.org](http://www.ruralhealthworks.org).

Workshops can also be requested to be presented on-site in a particular state for specific participants; however, the state will incur some costs for the workshop. Contact *the National Center* for further information.
Staff for the National Center

Gerald A. Doeksen, Director
Email: gad@okstate.edu

Cheryl F. St. Clair, Associate Director
Email: cheryl@okstate.edu
Direct Phone Line: 405-744-9824

Fred C. Eilrich, Project Analyst
Email: eilrich@okstate.edu

National Center for Rural Health Works
Oklahoma State University
Oklahoma Cooperative Extension Service
513 Ag Hall
Stillwater, OK 74078
Main Phone: 405-744-6083
Fax: 405-744-9835

Funding Support

Bridget Ware, Project Officer
Office of Rural Health Policy
HRSA, USDHHS
Phone: 301-443-3822
Email: BWare@hrsa.gov

National Center for Rural Health Works - National Advisory Council

Val Schott, Senior Vice President, Rural Community Hospitals of America
Alison Davis, University of Kentucky Center for Rural Health
Tom Harris, Department of Applied Economics, University of Nevada
John Packham, Nevada Office of Rural Health
Lisa Davis, Pennsylvania Office of Rural Health

Jonathan C. Sprague, Rocky Coast Consulting, Maine
Gabriela Boscan, Program Services, National Rural Health Association
Ann K. Peton, Center for Rural Health Policy, Education and Research, Edward Via College of Osteopathic Medicine
Jerry Coopey, Retired from USDHHS, HRSA, Office of Rural Health Policy

Website: www.ruralhealthworks.org

Merry Christmas and Happy New Year to ALL