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# The National Lung Cancer Screening Trial

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Lung cancer kills more Americans every year than any other kind of cancer.<sup>1,2</sup> A new nationwide study is underway that will test two different methods of looking for tiny lung tumors, to see if either approach can help catch cancer early and reduce the death rate among patients. The National Lung Screening Trial (NLST), (http://www.nci.nih.gov/NLST), will compare spiral computed tomography (CT) with standard chest x-ray. Both chest x-rays and spiral CT scans are capable of detecting lung cancer at an early stage. This study aims to determine whether either test is an effective screening method to reduce deaths from this disease. Lung cancer, which is most frequently caused by cigarette smoking, is the leading cause of cancer-related deaths in the United States. It is expected to claim nearly 155,000 lives in 2002. Lung cancer kills more people than cancers of the breast, prostate, colon, and pancreas combined. There are an estimated 90 million current and former smokers in the United States, all of whom are at high risk for lung cancer.1,2

Among American Indians and Alaska Natives, smoking is a major health problem, and smoking rates are higher than in the overall population. The tobacco usage rate is 42%, the highest of all minority groups, although use varies by region. For example, rates of currently smoking American Indians in the Plains region are 38% in men and 53% in women, about 1.5 times that of the non-Indian population. Smoking rates in American Indians in Oklahoma are 33%, and in New Mexico are 16%.

Among American Indians and Alaska Natives, the lung cancer incidence rates also vary by region, corresponding to the differences in smoking rates. Lung cancer incidence rates in Native American men in Minnesota (97/100,000) and Alaska (123/100,000) exceed those of non-Native American men (71/1000,000).<sup>6</sup> The death rate from lung and bronchus cancer among AI/AN men and women increased during the 1990s more than in any other racial group, most likely due to the increases in smoking rates.<sup>1</sup> Overall, American Indians have the poorest survival from lung cancer of any racial and ethnic group in the U.S. (e.g., African American, White, Hispanic, Asian American, and Pacific Islander).<sup>7</sup>

Women appear to be more susceptible to tobacco carcinogens than men.<sup>8</sup> Risks are consistently higher for women than for men at every level of exposure to cigarette smoke, which is attributable to the increased susceptibility to tobacco carcinogens.<sup>8</sup> For female smokers, lung cancer is the leading cause of death from about age 40 until age 75, and the chance of death

# In this Issue...

- 173 The National Lung Cancer Screening Trial
- 177 Creating a New Provider Type for Indian Health Service, Tribal, and Urban Health Care Facilities: Qualified Indian Health Program
- 183 Advanced Practice Nurses Annual Business Meeting Report
- 184 FAQs About the Glomerular Filtration Rate
- 186 NCME Videotapes Available
- 187 ACOG
- 188 Position Vacancies
- 190 Meetings of Interest

from lung cancer is markedly greater than the chance of death from breast cancer from age 35 and upwards, by a factor of 6-12 times.9

Smoking rates among Native American women are particularly high in some regions. Among women in Alaska, the smoking prevalence among Native American women is twice that of non-Native American women, and almost half of the Native American women are smokers, with about one-third being former smokers.<sup>10,11</sup> Similarly, in North Carolina, the smoking prevalence among Native American women is 1.5 times that of non-Native American women, with about 24-39% of Native American women being smokers and 15-34% being former smokers. 12-13

Concern about breast cancer has prompted widespread breast cancer screening programs. However, respiratory cancer is the leading cause of cancer death in women, and is the cancer for which rates have increased most rapidly.<sup>1,7-9</sup> In Alaska women, for example, the incidence of respiratory cancer has increased 500% in the last 30 years.14 The survival rates for respiratory cancer are far lower than are those of breast cancer among all women, including Native American women (see Table 1).7

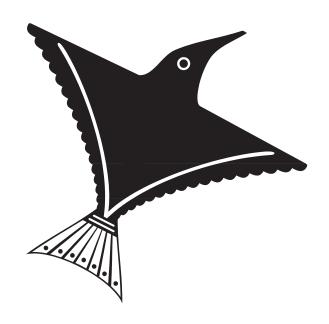
Table 1: Comparison of 5 Year Survival Rates (Seer Data, 1988-1997)

	Male	Female
Lung/Bronchus Cancer		
Non Hispanic White	13.6%	17.3%
American Indian and Alaska Native	10.2%	10.9%
Breast Cancer		
Non Hispanic White	-	81.5%
American Indian and Alaska Native	-	68.9%
Colorectal Cancer		
Non Hispanic White	59.1%	59.7%
American Indian and Alaska Native	58.0%	46.1%
Prostate Cancer		
Non Hispanic White	84.5%	
American Indian and Alaska Native	67.9%	

Currently, when lung cancer is detected, the disease has already spread outside the lung in 15 percent to 30 percent of cases. Spiral CT, a technology introduced in the 1990s, can pick up tumors well under 1 centimeter in size, while chest xrays detect tumors about 1 to 2 centimeters in size. Conventional wisdom suggests that the smaller the tumor, the more likely the chance of survival, which has been the rationale for breast and colon cancer screening. The NLST, because of the number of individuals participating and because it is a randomized, controlled trial, will be able to provide the evidence needed to determine whether spiral CT scans are better than chest x-rays for reducing a patient's chance of dying from lung cancer.

The National Lung Screening Trial will last until 2009, will enroll 50,000 current or former smokers, and will take place at 30 study sites throughout the United States. The study is funded by the National Cancer Institute. This trial is a randomized, controlled study — the "gold standard" of research studies — and is large enough to determine if there is a 20 percent or greater drop in lung cancer mortality from using spiral CT compared to chest x-ray. Participants are assigned by chance — randomized — to one of two groups, where one group receives one intervention and the other group receives another. One of the groups serves as a comparison group, or "control," for the other. In this screening study, participants will have an equal chance of being assigned to a group that is screened with spiral CT or to a group that is screened with chest x-ray. In a randomized trial, the goal is to determine if there are differences in outcomes between the two groups at the end of the study. The process of randomization aims to evenly distribute between the study groups all characteristics of the participants, such as health histories, that can influence outcome other than the interventions being studied.

A challenge for the NLST is reaching underserved populations. "In general, there is a risk of limited ethnic diversity because of the degree of mistrust among certain ethnic groups about the purpose of the trial, safety issues, and also the intention of the researchers. There are relatively few NLST physicians who are members of those ethnic communities," states Dr. Denise Aberle, Principal Investigator for the clinical trial.<sup>15</sup> The recruitment of American Indians and Alaska Natives into clinical trials presents a significant challenge to both researchers and providers. There are cultural differences and nuances that must be addressed, and systemic and structural barriers present obstacles.16



This clinical trial offers several benefits to patients who enroll in the trial. All participants will receive a free lung cancer screening exam. It is also possible that if lung cancer is detected, it may be caught at an early stage. Early detection of lung cancer may reduce symptoms from cancer, result in milder treatment with fewer side effects, and prolong life, but scientists don't know for sure that these things will happen. Data gathered from NLST will help to clarify some of these uncertainties. During the trial, if participants want to quit smoking, they will be referred to smoking cessation resources, but they do not have to quit to take part in the study. As participants enter the study, they will be randomized—assigned by chance—to receive either a spiral CT scan or a chest x-ray. They will have the same screening procedure again one and two years later. Until 2009, researchers will contact participants, by phone or mail, at least yearly to monitor their health.

For participants with positive screening tests, meaning that the screening test reveals an abnormality that might be cancer, the study centers will notify the participants and their primary care physicians and encourage a consultation with a cancer expert. Names of cancer experts will be provided upon request, but decisions regarding further evaluation will be made by participants and their physicians. Tests needed to follow up on a positive screening result may be performed at the study center, if participants and their physicians so choose.

There are possible risks involved in the trial; recent studies indicate that 25 to 60 percent, or more, of screening CT scans of smokers and former smokers will show abnormalities. Most of these abnormalities are not lung cancer. However, these abnormalities—scars from smoking, areas of inflammation, or other noncancerous conditions—can mimic lung cancer on scans and may require additional testing. These tests may cause anxiety for the participant or may lead to unnecessary biopsy or surgery. Some NLST centers will collect blood, urine, or sputum (phlegm). These samples will be used for future research to test biomarkers that may someday help doctors better diagnose lung cancer.

Patients eligible for the study are those who are current or former smokers, who have smoked heavily or for many years, and who are between 55 and 74 years of age. Potential participants should be in general good health, must not have a history of lung cancer, and must not, in the past five years, have been treated for or had evidence of any cancer, other than non-melanoma skin cancer or most in situ cancers (participants must not have had bladder cancer in situ or transitional cell cancer in situ in the past five years). Potential participants cannot be enrolled in any other cancer screening or cancer prevention trial and must not have had a CT scan of the chest or lungs within the prior 18 months.

People participating in the trial will be screened free of charge with either spiral CT or chest x-ray. However, costs for any diagnostic evaluation or treatment for lung cancer or other medical conditions will be charged to the participants in the same way as if they were not part of the trial. A participant's

medical insurance will pay for diagnosis and treatment according to the plan's policies. If the participant has no insurance, aid may be available at the local level to pay for biopsies and treatment.

The sites for the National Lung Screening Trial are scattered across the nation. Those that may be especially pertinent to American Indian populations include:

Salt Lake City, Utah

Denver, Colorado

Boise, Idaho

Iowa City, Iowa

Rochester, Minnesota

Minneapolis, Minnesota

Winston-Salem, North Carolina

Marshfield, Wisconsin

Los Angeles, California

Sites are also located in Texas, Alabama, South Carolina, Massachusetts, Pennsylvania, Southeastern Michigan, Ohio, Illinois, Missouri, Tennesee, Florida, Georgia, Hawaii, Kentucky, Maryland, New Hampshire, Rhode Island, and Washington DC. A list of sites can be found at <a href="http://www.nci.nih.gov/nlst/screeningcenters">http://www.nci.nih.gov/nlst/screeningcenters</a>.

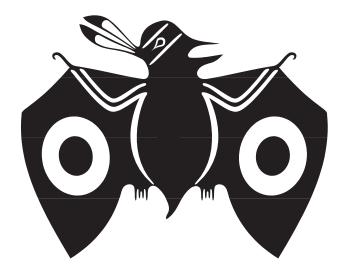
Patients can self-refer, or providers can assist referrals to this clinical trial by contacting the NCI's Cancer Information Service toll-free Monday through Friday, 9 am to 4:30 pm, at 1-800-4-CANCER (1-800-422-6237) for information about the trial in English or Spanish. The number for callers with TTY equipment is 1-800-332-8615.

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#### References

- MMWR On-Line Weekly Report. Reported by: Gargiullo P, Wingo PA, Coates RJ, Thompson TD, CDC, Morbidity and Mortality Weekly Report. Recent Trends In Mortality Rates for Four Majo Cancers, by Sex and Race/Ethnicity-United States, 1990-1998. MMWR. January 25, 2002; 51(03): 49-53. http://www.cdc.gov/mmwr/preview/mmwrhtml-/mm5103a1.htm.
- 2. http://www.nci.nih.gov/NLST
- Cheadle A, Pearson D, Wagner E, Psaty BM, Diehr P, Koepsell T. Relationship Between Socioeconomic Status, Health Status, and Lifestyle Practices of American Indians: Evidence from a Plains Reservation Population. Public Health Reports May-June 1994; 109(3): 405-413.
- Gilliland FD, Mahler R, Davis SM. Non-Ceremonial Tobacco Use among Southwestern Rural American Indians: The New Mexico American Indian Behavioral Risk Factor Survey. *Tobacco Control* 1998; 7: 156-160.
- Bursac Z, Campbell JE, Oklahoma Reach 2010 Steering Committee. Prevalence of Current Cigarette Smoking Among American Indians in Oklahoma: A Comparison. J Okla State Med Assoc 2002; 95(3): 155-158.
- Becker TM, Bettles J, Lapidus J, Campo J, Johnson CJ, Shipley D, Robertson LD. Improving Cancer Incidence Estimates for American Indians and Alaska Natives in the Pacific Northwest. Am J Public Health Sept 2002; 92(9): 1469-1471.
- Clegg LX, Li FP, Hankey BF, Chu K, Edwards BK. Cancer Survival Among US Whites and Minorities. Arch Med 2002; 162: 1985-1993.
- Zang EA, Wynder EL. Differences in Lung Cancer Risk Between Men and Women: Examination of the Evidence. J Natl Cancer Inst 1996; 88(3/4): 183-192.
- Woloshin S, Schwartz LM, Welch HG. Risk Charts: Putting Cancer in Context. J Natl Cancer Inst June 2002; 94(11): 799-804.
- Kaplan SD, Lanier AP, Merritt RK, Siegel PZ. Prevalence of Tobacco Use among Alaska Natives: A Review. Prev Med, July-Aug 1997; 26(4): 460-465.
- Filner JJ, Krohn KD, Lapidus JA, Becker TM. Risk Factors for Osteoporosis in Alaska Native Women: A Cross-Sectional Survey. Alaska Med 2002; 44(1): 8-13.
- Spangler JG, Bell RA, Dignan MB, Michielutte R. Prevalence and Predictors of Tobacco Use Among Lumbee Indian Women In Robeson County, North Carolina. J Community Health 1997; 22(2): 115-125.
- Spangler JG, Dignan MB, Michielutte R. Correlates of Tobacco Use among Native American Women in Western North Carolina. Am J Public Health 1997; 87: 108-111.
- Lanier AP, Kelly JJ, Holck P, Smith B, McEvoy T, Sandidge J. Cancer incidence in Alaska Natives thirtyyear report 1969-1998. *Alaska Med* 2001; 43(4): 87-115.
- 15. http://www.rsna.org/publications/rsnanews/feb03/nlst-1.html
- Hodge FS, Weinmann S, Roubideaux Y. Recruitment of American Indians and Alaska Natives Into Clinical Trials. Ann Epidemiol 2000; 10: S41-S48.



The following is the second of three papers that were written during the authors' participation in the Kaiser Family Foundation's Native American Health Policy Fellowship last year.

# Creating a New Provider Type for Indian Health Service, Tribal, and Urban Health Care Facilities: Qualified Indian Health Program

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## Background

Since the 1800s, health care services for Alaska Natives and American Indians have gone through vast changes based on who provided the care – from the military, to the Bureau of Indian Affairs, and then in 1955 to the Indian Health Service, which was created first as a branch, and then as an agency of the US Public Health Service. More recently, federally recognized tribes have had the opportunity to manage and administer health care facilities through Public Law 93-638 Self Determination contracts. Urban Indian organizations are not eligible to contract, but they are eligible to receive Title V grants through the Indian Health Care Improvement Act (IHCIA).

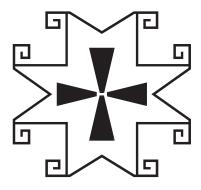
This Act directs the Secretary of the Interior to contract with any requesting tribal organization to carry out programs the federal government provides to such tribe or tribal oganization. In addition to managing their own health programs, tribes are also eligible to receive reimbursements for health care services delivered to Indian patients enrolled in Medicare, Medicaid, and the Children's Health Insurance Program. This paper is a review of federal reimbursement for Indian health care services and a proposal for establishing the Qualified Indian Health Program to aid in maximizing reimbursement to Indian health programs.

# The Indian Health Care System

The key legislation that initially authorized the federal government to fulfill its trust responsibility to provide health care to tribes was the passage of the Snyder Act of 1921. It authorized funds "... for the relief of distress and conservation of health ... (and) for the employment of ... physician ... for Indian tribes in the United States." Then in 1976, Congress passed the Indian Health Care Improvement Act (Pl 94-437). This Act addressed the continued lag of Indian health behind that of the general population and set forth a national goal to provide the "the highest possible health status to Indians and to provide existing Indian health services with all resources nec-

essary to carry out that policy." The Act contained a vast array of provisions designed to increase the quantity and quality of Indian health services and to improve the participation of Indians in planning and providing those services.

The IHCIA also provide for the consolidation and authorization of funding for existing Indian Health Service programs, funding authorization for facilities construction, and authorization of health and medical services for urban Indians. The Seattle Kinatechitapi Indian Clinic was instrumental in adding a provision in the IHCIA to provide funding for urban Indian health programs. The Act also establishes scholarship programs, and authorizes construction of safe water and sanitary waste disposal facilities for Indian homes and communities, and gives preference to Indian contractors in construction projects. For the first time, the Act authorized Medicare (hospitals) and Medicaid (facilities) reimbursements for services performed in Indian health facilities.



The Indian Health Service delivers health care services to American Indians and Alaska Natives through 1) its own hospitals, outpatient health clincs, and small health centers; 2) contracts (or compacts) with tribes under PL 93-638; 3) purchased services or "contract" health services which are obtained from non-Indian hospitals and health practitioners; and 4) grants to urban Indian organizations under Title V of the IHCIA. A constant challenge, however, is how to deliver quality services when federal funding allocations for the Indian Health Service are chronically insufficient. The disparity in funding allocations for the Indian Health Service and the Medicaid program is a concern that tribal health organizations strive to address in national and state forums that focus on health care policy issues.

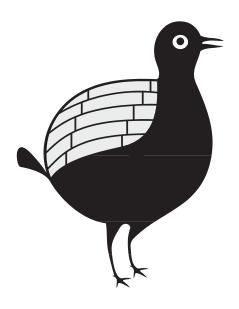
#### **Reimbursement for Services**

With a growing patient load at most Indian health facilities (the three types are Indian Health Service facilities, triballyoperated programs, and urban Indian clinics, all often grouped under the acronym "ITUs"), and rising costs of providing health care, administrators and health boards are looking for ways to generate revenues to keep up with the operational and maintenance costs of their services. ITUs are eligible for reimbursement for services provided to eligible beneficiaries of Medicaid, Medicare, and State Children Health Insurance Programs, so Indian health programs have been working to maximize their reimbursements from these sources. However, reimbursement rates vary from facility to facility based on their status as an Indian health care facility (tribally owned and operated, Indian Health Service owned and operated, or Indian Health Services owned but tribally operated), or a Federally Qualified Health Center.

In 1989, Federally Qualified Health Centers (FQHCs) were created by Congress as a mechanism to provide Medicaid programs and reimbursement for community health centers and migrant health and homeless programs. FQHCs are rural and urban health centers that serve low income people; these centers have no cost shifting, as is seen in managed care organizations, and they are paid by Medicaid and Medicare for the costs of services provided to Medicaid or Medicare beneficiaries. In 1990, tribally operated and Urban Indian clinics were deemed to qualify as FQHCs in the Omnibus Budget Reconciliation Act of 1990. Then in 1997, the Balanced Budget Act allowed states to phase down FQHC reimbursement from 100% of reasonable costs to 80% over three years.

Reducing the FQHC reimbursement rates creates a financial burden for FQHCs that rely on Medicaid reimbursements for services rendered to low income consumers, who are their primary source of revenue. As managed care program availability increased, states wanted to roll Medicaid recipients into managed care plans that cost less than FQHCs. However, Congress has since changed the FQHC reimbursement schedule to 100% of reasonable costs plus inflation measured from a set base year.

The Federal Medical Assistance Percentage (FMAP) refers to that percentage of a Medicaid cost that is paid by the federal government. Under current law, states receive federal Medicaid matching payments for the costs of covered services used by individuals enrolled in Medicaid, and the rates vary depending on each state's per capita income. When an Indian Health Service hospital or clinic provides health care services to Medicaid eligible Native American beneficiaries, however, the state's federal matching rate (FMAP) is 100%, which means the federal government pays the entire cost to the state. Under a 1996 Memorandum of Agreement (MOA) between the Indian Health Service and the Health Care Financing Administration, now called the Centers for Medicare and Medicaid Services (CMS), the state also receives a 100% federal match if a Native American beneficiary receives services from a PL 63-638 tribally owned facility operated under a contract. However, when a Native beneficiary receives services from an Urban Indian organization's program funded by Title V, the regular FMAP for the state, not the 100% FMAP, applies. Thus, states have a financial incentive to encourage Indian Medicaid beneficiaries to seek services at Indian Health Service and tribally operated facilities, but do not have such incentives regarding use of an urban Indian clinic.



The IHCIA is reauthorized every ten years, and its latest extension was through September 30, 2001; several unsuccessful attempts were made in the 106th and 107th Congresses to amend and reauthorize the Act. Congress still has the authority to appropriate funding for Indian health because of the enactment of the 1921 Snyder Act. Reauthorizing the IHCIA creates opportunities to make changes in provisions that warrant changes, such as updating language in Title IV Access to Health Care Services to reflect current Medicaid and Medicare regulations, and creating more advantageous reimbursement options for all Indian health programs.

# The Qualified Indian Health Program (QIHP) Proposal

The Indian Health Care Improvement Act was up for reauthorization in 2000, which gave tribal health leaders an opportunity to develop proposals to improve and update the Act. In the first session of the 107th Congress, Mr. George Miller introduced HR 1662 to reauthorize the IHCIA, which included proposals to improve the Act based on input from tribal health organizations and other interest groups. The National Steering Committee, which has representatives from ITUs, became the tribes' vehicle to draft the proposals. Among the committee's recommendations was the creation of the "Qualified Indian Health Program." This proposal was in response to the reduction of the FQHCs reimbursement rates from 100% to 80%. The QIHP would create a new provider type and cost-based reimbursement for qualifying Indian health programs. National Steering Committee stated the main objectives of the OIHP:

- Maximize recovery from all third-party coverages, including Medicaid, Medicare, and State Children's Health Insurance Programs (SCHIP) and any new federally funded programs.
- Ensure that American Indian and Alaska Natives (AI/AN) have access to culturally competent care provided by the Indian Health Service, tribes and tribal organizations, and urban Indian organizations, and therefore, are not assigned without their approval to non-Indian managed care plans.
- Ensure that when services are provided by an Indian health program, the full costs, including indirect costs, of providing the service will be reimbursed.
- Ensure ongoing consultation between Health Care Financing Administration (now CMS), State Medicare Programs, and Indian health programs so that the principles set forth above are honored.

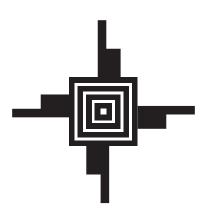
The primary motivation behind the QIHP concept was to establish a specific reimbursement methodology for the ITUs that took the best parts of existing reimbursement methodologies such as Medicaid, Medicare, and SCHIP. Health programs would have to choose the provider type for which they seek reimbursement at the beginning of the year and then must choose a provider enrollment if qualified to be such a provider.

If HR 1662 or its Senate counterpart, S212, passed the 107th Congress to reauthorize the Indian Health Care Improvement Act, the QIHP proposal would become law, allowing Indian health facilities to maximize access to reimbursements from Medicaid, Medicare, and Children's Health Insurance Program. The National Steering Committee feels that the Indian Health Service budget underfunds the Alaska Native and American Indian health care facilities, and supports establishment of a rate of recovery through QIHP, which would enhance reimbursements to facilities funded through the Indian Health Service (ITUs).

# **Analysis Of The QIHP Proposal**

Benefits to Reimbursement. The purpose of QIHP is to create a new provider type for ITUs to make them eligible for Medicaid, Medicare, and SCHIP reimbursements. All ITUs would qualify for QIHP, specifically to achieve full cost recovery with indirect costs. A QIHP provider could select the method that gives the greatest payment for each period from a menu of reimbursement options that include:

- Full cost recovery from Medicaid and Medicare (M/M) and SCHIP.
- Indian Health Service all-inclusive rate on a per encounter or per diem basis; as any other provider type in the Social Security Act, with indirect costs added for which the QIHP can qualify; or
- 3. A negotiated rate or methodology.



Continued use of the all-inclusive rate was only one payment option offered by QIHP and, like the HCFA/Indian Health Services MOA, it covers Indian and tribal programs, and applies to Medicaid. QIHP would eliminate coinsurance, copays, and deductibles consistent with current CMS policy for AI/AN. The proposed additional services that QIHP would cover are costs for outstationing eligibility workers, payment for services that are covered by physician services when they are provided by other types of health care providers (health aides, home health care providers); offsite services the same as onsite, federal indirect cost rates, and transportation for providers and patients.

The QIHP rate would be calculated by using Medicare costs reports, using separate rates for each facility, and would include adjustments currently in federal law for special circumstances, such as graduate medical education programs. Department of Health and Human Services (DHHS) would have to promulgate policy that provides a specific methodology for ITUs to be eligible for Medicaid, Medicare, and SCHIP reimbursements.

Impact on the Reimbursement Process. However, DHHS opposes the creation of QIHP, specifically for the complexity involved in establishing a new provider type, the challenges to administer the program, and its budgetary impact. Under existing law, Medicaid and Medicare providers select one provider type under which they qualify and receive reimbursements based on requirements for that particular provider type. If QIHP is implemented, the Centers for Medicare and Medicaid Services would calculate various payment methods during each payment period to determine which one generates the greatest payment and assign it to the ITU.

Of concern to DHHS is the anticipated process involved to calculate the various payment methods because of the extra time and resources involved to administer the new program. CMS would have to compute various payment methods to determine which one produces the greatest payment and assign that provider type to the ITU for the payment period. Under current law, Medicaid and Medicare providers select one provider type for which it qualifies and receives reimbursement based on the requirements for that provider type. This computation is limited and does not involve extra resources and time.

Cost Estimates for QIHP. The Congressional Budget Office (CBO) scored QIHP as presented in S212 (Reauthorization of the Indian Health Care Improvement Act) at \$3.24 billion over 10 years for all Medicaid, Medicare, and SCHIP provisions. The QIHP proposal is the most costly element of S212 and HR 1662. Over a 10-year period, CBO estimates the range of annual additional costs for each program to be:

Medicare	\$170 to 275 million annually
Medicaid	\$55 to 125 million annually
SCHIP	\$5 to 10 million annually

Case Study: The Impact on Norton Sound Health Corporation. The Indian Health Service owns most of the health care facilities in Alaska and leases these facilities to health corporations such as the Yukon Kuskokwim Health Corporation in Bethel, Alaska. Norton Sound Health Corporation (NSHC) in Nome, Alaska serves fifteen villages and operates a hospital with 10 inpatient rooms. NSHC is owned and operated by the tribes it serves and was never an Indian Health Service facility. However, NSHC receives annual operational funding from the Indian Health Service through a PL 93-638 tribal compact. Each village has a health clinic that is owned by local tribal or City Councils and leased by the Indian Health Service through the Village Built Clinic leasing program. Services at facilities leased by the Indian Health Service are reimbursed by Medicare at a different rate than are services at facilities owned by IHS. For example, in Alaska, Indian Health Service owned and operated and tribally managed facilities receive an all-inclusive rate from Medicare, whereas this does not apply to the NSHC Facility. NSHC has never received an all-inclusive rate from Medicare. It does get an all-inclusive rate from Medicaid, through care provided by lay community health aides, which is covered under a separate reimbursement schedule. However, Medicaid does have a separate health aide reimbursement schedule. To apply for the allinclusive rate, NSHC only applies for village clinics and the Nome outpatient clinic.

NSHC is treated like a non-Indian hospital and receives a lower reimbursement rate and submits cost reports. They are reimbursed under other Medicare rules that apply to non-Indian Health Service facilities. The methodology under Medicare for the type of reimbursement NSHC receives is the lower of costs or charges. This means NSHC is paid the lower of either the cost of the services or the charge that is billed to Medicare; if NSHC's charges do not cover costs, then NSHC is responsible for covering the balance. NSHC would qualify for QIHP and benefit by maximizing their ability to recovery from all third-party coverages that include Medicaid, Medicare, and SCHIP.

Case Study: The Impact on Seattle Indian Health Board. The Qualified Indian Health Program would benefit an Urban Indian health program like the Seattle Indian Health Board (SIHB). SIHB provides outpatient, primary care medical care including obstetrics, general dentistry, and mental health services and residential and outpatient substance abuse treatment. It also offers its own WIC program, a state-licensed pharmacy, and CLIA-approved laboratory on site. Additionally, SIHB operates the only family practice physician residency training program with a focus on Indian health, and manages the Urban Indian Health Institute, a national focus research and epidemiology program to study urban Indian health issues. In FY 2001, SIHB served 6,746 patients through their direct service programs; 4,161 of these patients were American Indians or Alaska Natives.

Urban Indian health programs like SIHB are private, non-profit organizations that do not enjoy the benefits of the Indian Health Service/HCFA (CMS) Memorandum of Agreement that provides for a 100% FMAP. Instead, the state must pay its share of the costs for SIHB's services to Medicaid patients. Urban programs that offer Medicaid or Medicare eligible services are certified by the state as providers and receive payment either as a Federally Qualified Health Center, if they meet the standards for this classification, or on a fee-for-service basis.

SIHB is among the few FQHC centers that currently receive payment under the new Prospective Payment System (PPS). Unfortunately, changes to the state's interpretation of its Indian exemption program will eliminate their ability to use the exemption for Indian patients; this reduces access and place burdens on tribal clinics. A provision in HR 1662 would extend the 100% FMAP to Medicaid services provided by urban Indian health programs, which would benefit SIHB. If this provision is not included and funding for the Indian Health Service continues to decline due to tribes compacting their own health programs and reduced Congressional appropriations, the urban Indian health programs will be forced to limit services to enrolled tribal members or to tribal members who reside in the service area.

Reimbursement Rates. The Indian Health Service published its reimbursement rates in the Federal Register, Volume 16, No. 64, March 20, 2002: "As of March 2002, the Indian Health Service approved the following rates for inpatient and outpatient Medicare provided by Indian Health Service facilities for FY 2002 for Medicare and Medicaid beneficiaries of other federal agencies. These rates do not include physician services; Indian Health Service facilities may also be entitled to bill state Medicaid programs for physician services to the extent that those services meet applicable requirements under an approved State Medicaid Plan."

<u>Inpatient</u>	Hospital	Per	Diem	Rates	(excludes	Physician
Services)	_					-
Lowe	er 48 State	20			\$1.507	

<u>Scrvices)</u>	
Lower 48 States	\$1,507
Alaska	\$1,967
Outpatient Per Visit rate (excluding	ng Medicare)
Lower 48 States	\$ 197
Alaska	\$ 374
Outpatient Per Visit Rate (Medica	are)
Lower 48 States	\$ 160
Alaska	\$ 364
Medicare Part B Inpatient Ancilla	ary Per Diem Rate
Lower 48 States	\$ 287
Alaska	\$ 687

# Conclusions/Recommendations

The National Steering Committee proposed the QIHP, which is an important provision that would create a new provider type for ITUs that would allow them to choose a provider type when seeking reimbursement for

Medicaid/Medicare and SCHIP and choose a provider enrollment if qualified to be such a provider. Mr. Hansen, chairman of House Resources Committee, proposed introducing a bill to reauthorize the IHCIA using HR 1662 as a framework for his draft. However, it was not finalized and a bill is not forthcoming this year.

As a safety net, the Senate Indian Affairs Committee has introduced S 2711 Technical Amendments bill, which includes a provision to extend the IHCIA for one year. There was agreement between the House Resources Committee, the Senate Committee on Indian Affairs, and the House Energy and Commerce Committee to extend the Act for only one year. Recently, there has been an issue raised by policymakers, namely that the IHCIA is race-based and benefits only Native Americans and Alaskan Natives. As a compromise between the House Resources Committee and the Senate Indian Affairs Committee, the Act would be reauthorized until 2004 rather than 2006 if a bill passed in this year's congress.

In the 108th Congress, it is unclear if the QIHP provision will remain as part of an IHCIA Reauthorization bill because of the high CBO scoring and DHHS's concerns about implementing a new program without additional resource support. In response, the tribal health representatives who attended the Northwest Portland Area Indian Health Board's meeting on the reauthorization of the IHCIA in May 2002 agreed to drop the QIHP proposal in return for an in-depth study. The Secretary would be directed to study and recommend a specific payment methodology for ITUs under Medicare. This tribal proposal calls for the examination of cost based recovery along with consideration of the sufficiency of existing Medicare payment rates such as PPS and the current Indian Health Service allinclusive rate. It would require continued use of the all-inclusive rate until Congress can consider the study's recommendations. The National Steering Committee may want to include other matters in the study. The timing of this study depends on the passage of the IHCIA. If Congress does not pass IHCIA legislation next year, it would behoove the tribes and National Steering Committee to hire an independent group like the Medicaid Payment Advisory Committee to undertake the study rather than waiting for congressional enactment to authorize the study. Recommendations from this study could contain unbiased suggestions for payment methodologies for ITUs under Medicare and other related solutions.

To ensure that the QIHP proposal or a similar provision addresses the reimbursement issues that tribes support is kept in future ICHIA bills, the National Steering Committee and supporters would need to work with Congress and their committee staff on key provisions such as Title IV (Access to Health Care Services). The key authorizing committees are the House Resources, Energy and Commerce (Medicaid/Medicare parts A, B & SCHIP), and Ways and Means (Medicare Parts A, B & C Medicare plus Choice). Consulting with the congressional committees and working with the administrative staff is a critical element for the tribes

to consider as they seek changes to existing federal policies.

The proposal for creating a provider type to allow ITUs to maximize Medicaid, Medicare, and SCHIP revenues is an example of how tribes could affect federal policy. In the process, tribes must fully engage in networking with policy-makers and understand the dynamics of the policymaking process in order to successfully achieve their goal of affecting federal policy. Historically, tribes did not have the opportunity to participate in writing federal policy that affected their communities. They were mainly on the defensive, trying to protect their right to be fully recognized as U.S. citizens and to continue being the self governing people they have always been

Given the significant underfunding of the Indian health system, solutions to the challenges of receiving maximal reimbursement for services for federal program recipients are desperately needed so that Indian health programs can continue to help reduce health disparities in this population. Whether or not the additional funding will be secured in the 108th Congress is uncertain. Meanwhile, the Indian Health Service will continue to face issues that may affect the ability to provide health care as stipulated in the IHCIA, including inadequate federal funding for Indian health programs; the inability of Congress to pass legislation to reauthorize the IHCIA; and Supreme Court rulings such as Johnson v McIntosh, which set a precedent to extinguish Indian title to land rights, thus impacting the federal government's relationship with tribes. Efforts to draft IHCIA reauthorization legislation that is acceptable to both parties in the House and DHHS have been challenging, primarily because few fully understand the federal government's relationship with tribal governments, its obligation to provide health care to AI/AN, and how health services are administered.

The National Steering Committee's idea of creating a new provider type for generating new methods of reimbursement payments for health facilities as a new revenue source deserves full support. However, the tribal proposal that would direct the Secretary of DHHS or an independent group like MedPAC to conduct a survey that recommends a payment methodology for ITUs under Medicaid is another valid option to consider in this political climate. MedPac is an independent federal body that advises Congress on issues affecting the Medicare program. Tribes could give input in writing to the study and work with Congress, their staff, and state and federal agencies to implement the recommendations. This proposal, if supported by all interested parties, could be included as a provision whenever Congress passes legislation to reauthorize the IHCIA.

#### References

- List of Issues for Tribal Consideration with Decisions and Responses, May 29, 2002; Handout from the Northwest Indian Health Board Meeting in Portland, May 28-30, 2002.
- 2. Federal Register, Vol. 67, No. 61, March 2002.
- 3. Barbero, Carol, Hobbs, Straus, Dean & Walker, LLP,

- Washington, DC.
- Bergman, Abraham. The Political History of the Indian Health Services. Milbank Quarterly, November 1999 issue.
- Dixon and Roubideaux. Promises to Keep: Public Health Policy for American Indians & Alaska Natives in the 21st Century.
- 6. Dixon, Mim, University of Arizona.
- Forquera, Ralph. Seattle Indian Health Board, Seattle, WA.
- Geches, David, Wilkinson, Charles F., Williams Jr., Robert A. Cases and Materials on Federal Indian Law. 4th Edition.
- Miller, Amy, Norton Sound Health Corporation, Nome, AK.



# **Advanced Practice Nurses Annual Business Meeting Report**

Judith Whitecrane, CNM, Phoenix Indian Medical Center, Phoenix, Arizona; APN Representative, National Council of Nurses

The Annual Business Meeting for Advanced Practice Nurses (APNs) was held June 9-10,2003, in conjunction with the PA/APN Continuing Education Conference in Scottsdale, Arizona. About 40 APNs from IHS, tribal, and urban programs attended, representing family practice, pediatrics, nurse-midwifery, adult health, and women's health nurse practitioners. They came from 24 Indian health system sites throughout the United States.

Celissa Stephens, RN, MS, IHS Acting Principal Nurse Consultant, met with the nurse practitioners and discussed their concerns. What follows is some of the highlights of these meetings.

#### **APN Best Practices:**

- One APN has been certified in addiction medicine/chronic pain management and has a practice dedicated to care of these clients.
- Development of school-based clinics with Medicaid reimbursement on a reservation in Arizona by a nurse practitioner. This has expanded to three APNs covering four schools and a fourth position has been advertised. Parental satisfaction is high. It is helping to meet GPRA indicators.
- Geriatric NPs are working in off-site nursing homes and providing gentle and loving care for the aged.
- Mental Health NPs are one of the (unfortunately!) best-kept secrets in Indian Health. They are providing care in areas where psychiatrist positions are chronically unfilled.

# The 2003 work plan for Nurse Practitioners in I/T/Us is as follows

- NP Licensure issues. Since NPs may be licensed in any state, and since NP scope of practice varies from state to state, much confusion exists regarding what APNs can do and how to credential and supervise them. Recommendation: A federal scope of work is proposed as a solution that would help standardize APN practice at IHS facilities.
- Position Descriptions/Classification. Federal Position

Descriptions and Classification Standards are so out of date that they have little resemblance to current APN practice. The US Office of Personnel Management is working on a revision of these. Recommendation: These documents will be reviewed by APNs in I/T/Us when they are in draft form to insure that they accurately reflect the current work environment of APNs in Indian health.

- Civil Service Grades/CO Billets. APNs in a few Areas are limited to Civil Service GS-11 grade while almost all positions elsewhere have the potential to make the GS-12 grade. Some Commissioned Officers are in billets whose scope of work, independence, complexity of patient care, remote setting, administrative duties, and other factors would easily qualify for an 0-6 billet. Recommendation: Encourage Areas to review and upgrade billets and Civil Service grades to appropriate levels.
- Leadership. APNs are eager to play a more active role
  in local and national leadership activities.
  Recommendation: Consider funding APNs for the
  Executive Leadership Development Program (ELDP)
  and the Leadership in Context (LINC) training and
  promoting inclusion in leadership positions and activities.
- Continuing Medical Education funding. Many APNs expressed gratitude for receiving CME funding equal to that of their physician colleagues, while others do not receive this level of support and find continuing education activities cost prohibitive. Recommendation: Encourage equal CME funding for APNs and physicians in Indian health.

The financial contribution of the IHS Nursing Program to make these meetings possible is gratefully acknowledged.

# **FAQs About the Glomerular Filtration Rate**

This article is the twelfth of a series about Chronic Kidney Disease and its management based on the new National Kidney Foundation guidelines. If you missed previous articles in this series, log onto the IHS website. Archived issues of The IHS Provider may be found from the Clinical Support Center's page.

Andrew S. Narva, MD and Theresa Kuracina, RD, both of the IHS Kidney Disease Program, Albuquerque, New Mexico

Now that the equation to estimate the glomerular filtration rate (GFR) is built into the new Resource and Patient Management System (RPMS) lab software patch, providers are asking questions about the GFR listed on the lab results.

# Why have the estimated GFR listed on the chemistry panel in RPMS?

GFR results give providers an estimate of functioning renal mass. In addition, providers can identify, assess and monitor the stage of kidney disease and provide care based on that stage.

# What is the glomerular filtration rate (GFR)?

True GFR is the actual glomerular filtration rate measured by inulin clearance, a cumbersome procedure performed only for research purposes. GFR measures functioning renal mass and filtering capacity of the kidneys. Listed in units of mL/min/1.73 m², (normalized for body surface area) the GFR is the sum of the rates of all filtering nephrons in the kidneys (roughly one million nephrons/kidney). Nephrons that have been scarred or damaged no longer contribute to the filtering capability of the kidneys.

#### What is a normal GFR?

This varies depending on the reference used. In young, healthy, hydrated adults, inulin clearance measurements showed means of 127 mL/min/1.73 m² for males and 118 mL/min/1.73 m² for females (with a standard deviation of about 20 mL/min/1.73m²). In general, GFR declines with age by about 1 mL/min/1.73 m² per year after age 30.

# What is the difference between GFR and creatinine clearance?

Creatinine clearance performed with a 24-hour urine is an approximation of the glomerular filtration rate. Creatinine comes from muscle metabolism and is released at a fairly constant rate. It is freely filtered across the glomeruli and is not reabsorbed or metabolized by the kidney. However, a small amount of creatinine is secreted into the filtrate in the proximal tubules, adding to the amount excreted by the kidneys. As kidney function (GFR) declines, less creatinine is filtered, yet the secretion continues. The amount of creatinine in the urine is a

combination of filtration and secretion of creatinine, not filtration alone. As a result, creatinine clearance tends to overestimate kidney function.

# Why use an equation to estimate GFR?

Estimating GFR using prediction equations is cost effective. Twenty-four hour urine collections are not required, making it easier for all involved. Note that all prediction equations are "predictions." The bias, precision, and accuracy of these equations have an effect. The Modification of Diet in Renal Disease (MDRD) equation provides the best prediction of GFR for the most people. However, the equation is less useful in people who are extremely malnourished or overnourished.



#### Which GFR equation is used in RPMS?

The abbreviated MDRD equation is used.

Estimated GFR ( $mL/min/1.73 \ m^2$ ) = 186 x (Scr)<sup>-1.154</sup> x (age) <sup>-0.203</sup> x (0.742 if female) x (1.21 if African-American)

There are several variations of the MDRD equation. The recommended equation uses only age, gender, race, and serum creatinine as variables. Fortunately these variables are readily available through RPMS at the time serum creatinine is reported. This is the same GFR calculator used on the National Kidney Foundation and National Kidney Disease Education Program websites. There is marginal improvement when albumin and serum urea nitrogen are included in the calculation, but it is not felt that the burden of including additional variables is worth the minimal improvement in results.

# Why is the new abbreviated MDRD formula better than the Cockcroft-Gault Equation?

The MDRD equation is more accurate and precise. Published in 1975, the Cockcroft-Gault equation was derived to predict creatinine clearance from serum creatinine based on 249 Canadian males (veterans) ages 18 - 92. The MDRD equations were derived to predict glomerular filtration rate from serum creatinine based on 1628 males (60%) and females with known kidney disease.

# Why should we use GFR instead of just looking at serum creatinine?

Equations that estimate GFR from serum creatinine are more accurate when assessing kidney function than serum creatinine alone. For example, a 70 year old woman's serum creatinine is 1.2 mg/dL. Depending on your lab's "normal" ranges for serum creatinine, that is either at the high end of normal or just above the upper limits of normal. Let's say this woman weighs 72 kg. Using the Cockcroft-Gault equation, her estimated creatinine clearance is 49 mL/min/1.73 m². Using the abbreviated MDRD equation; her estimated GFR is 47 mL/min/1.73 m². Regardless of the prediction equation used, the estimate indicates a reduction in kidney function that is not easily ascertained from serum creatinine alone.

#### What does "normalized" GFR mean?

The estimated GFR produced by the MDRD equation is "normalized" for body surface area. The term "normalized" means that two people of different sizes may have the same GFR per 1.73m² (body surface area or BSA) but their actual GFRs may be different. A 100 kg man with a normalized GFR of 90 mL/min/1.73 m² may have a measured GFR of 150 mL/min because he has 2.4 m² of BSA, while a 55 kg woman also with a normalized GFR of 90 mL/min/1.73 m² may have a measured GFR of 70 mL/min because she has only 1.4 m² of BSA. Normalizing allows us to compare a variable, GFR,

which varies with body size, between people of different body sizes.

The prediction equation for GFR was developed as a result of the Modification of Diet in Renal Disease study, an National Institutes of Health funded study on nutrition and kidney disease. For detailed information on validation studies, please look at: http://www.kidney.org/professionals/doqi/kdoqi/p5\_lab\_g4.htm.





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