



# THE IHS PRIMARY CARE PROVIDER

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## Prenatal HIV Screening: Gaps and Best Practices

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### Background

Since the advent of greatly enhanced medical protocols to prevent viral transmission during childbirth, mother-to-child transmission of human immunodeficiency virus (HIV) is now almost entirely preventable if the correct prophylaxis is administered around delivery.<sup>1,2</sup> Without intervention, a child born in the US to a mother with HIV has an approximately 1 in 4 chance of being infected with HIV.<sup>3-5</sup> With proper perinatal HIV prophylaxis, the risk of mother-to-child transmission can now be reduced to < 2%,<sup>6-10</sup> making detection and treatment of HIV in pregnant women a public health imperative.

Although universal testing for HIV among pregnant women has been an accepted national recommendation since shortly after the introduction of prophylaxis to reduce mother-to-child transmission,<sup>11,12</sup> studies have shown that screening rates often remain well below 100%.<sup>13-17</sup> To decrease barriers to testing, the Centers for Disease Control and Prevention (CDC) has recommended an “opt-out” prenatal HIV testing policy since 1999, whereby a pregnant woman will be screened unless she actively refuses testing.<sup>18</sup> Opt-out testing has been shown to increase prenatal HIV screening.<sup>19</sup>

Prenatal HIV screening is considered important enough that it has been included as a core quality indicator in the Government Performance and Results Act (GPRA), through which the Indian Health Service (IHS) is accountable to the US Congress. IHS measures, and reports via GPRA, the percent of pregnant women who are screened for HIV during their pregnancy. The nationwide rate of prenatal HIV screening in IHS increased from the baseline October 2005 rate of 54%, low but similar to estimates in other US groups,<sup>20</sup> to 74% in October 2007.

This project’s goals were to understand the process of prenatal HIV testing in IHS; efficiently and accurately estimate HIV screening rates among pregnant IHS American Indians

and Alaska Natives (AI/ANs) nationwide; and to improve prenatal HIV screening rates in Indian Country. The project was supported and funded by the Minority AIDS Initiative (MAI), and implemented by the Division of Epidemiology and Disease Prevention in collaboration with the National IHS HIV/AIDS Program.

### Methods

We randomly selected service units nationwide. The sample was weighted by geography and user population, so larger service units in Areas with a larger user population were more likely to be selected.

We sent selected service units a standardized set of computer commands to draw up a list of patients who were seen in prenatal care during March 2005 - March 2006 but were not screened for HIV, making them GPRA “misses.” These patients were put into random order and the first 25 available charts on the list were reviewed. Some small clinics had fewer than 25 GPRA misses during the study period, in which case all available misses were reviewed.

We used the standard IHS definition of prenatal care: at least two visits with Purpose of Visit (POV) of pregnancy during the past 20 months, with one diagnosis occurring during the reporting period, and with no documented miscarriage or abortion occurring after the second pregnancy POV.

A standardized data collection instrument was used to record patient data, including date of birth, estimated date of

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confinement, dates of HIV and other routine infectious disease tests (syphilis, gonorrhea/chlamydia, and hepatitis B), and other relevant aspects of care such as transfers or documentation of a declined HIV test. Data from either physical charts or electronic health records (EHRs) were recorded in a database that contained no patient identifiers. No personally identifiable data left any site.

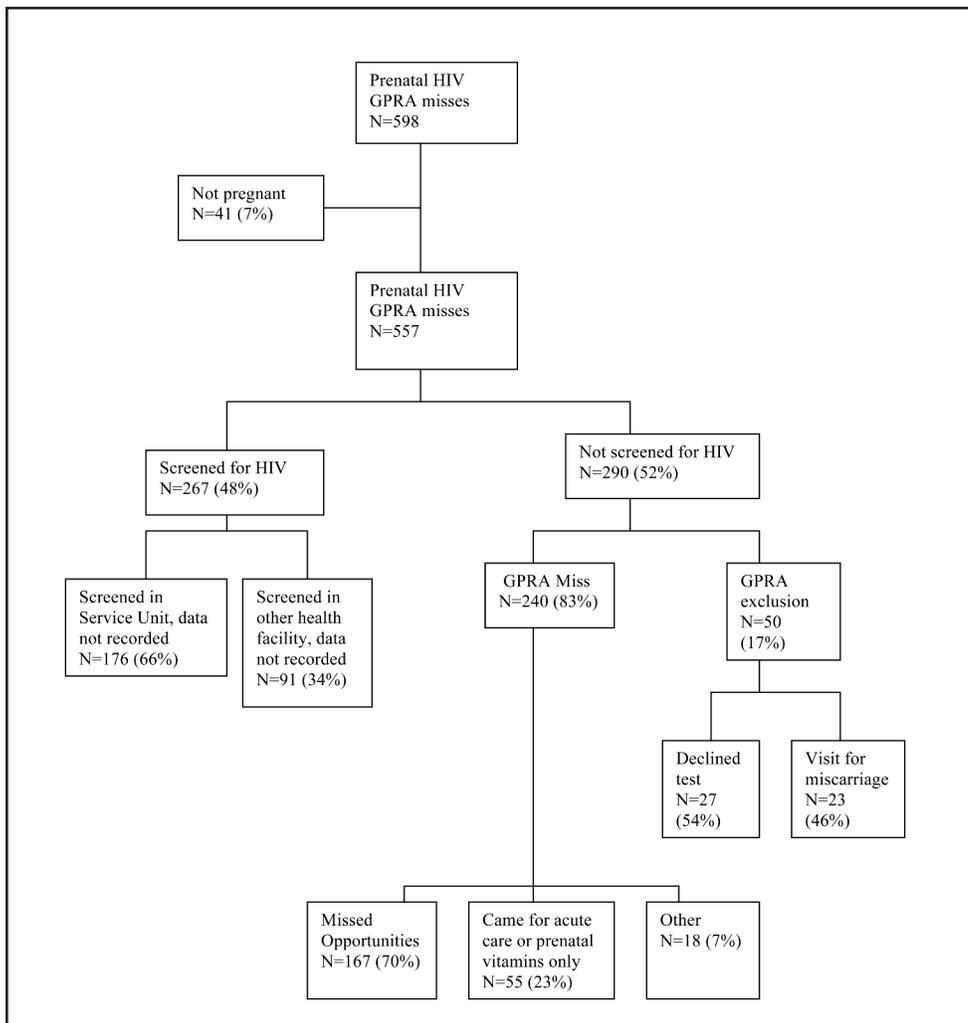
Investigators also gathered qualitative data about patient and data flow during on-site interviews with clinical health providers, administrative officers, and health technologists for recommendations on improvements.

Each service unit in the sample was given facility-specific results of our investigation within two weeks of our visit.

## Results

We reviewed 598 records from 27 sites, of which 41 (7%) were not pregnant and removed from further analysis. Of the remaining 557 charts, 290 (52%) were not screened for HIV, and 267 (48%) had been screened for HIV, as per figure 1.

**Figure 1. Prenatal HIV GPRA “Misses”**



*Not tested for HIV:* Among the 290 pregnant women not screened for HIV, the majority had no HIV screening despite having had  $\geq 2$  prenatal care encounters (167/290, 58%). These women represent “missed opportunities,” patients whose care fell outside of current recommendations and could not be otherwise explained.

It was difficult to determine underlying causes of the missed opportunities in chart review. However, a majority of misses (118/167, 71%) had prenatal testing for other infectious diseases, so providers appeared to have specifically (and incorrectly) excluded HIV from these patients’ prenatal testing.

Fifty misses (50/290, 17%) were women who declined or had a miscarriage/termination. If documented in RPMS, GPRA logic removes women who declined an HIV test or had a miscarriage/termination from the prenatal pool, so these patients should not be a miss, and instead represent data error.

*Tested for HIV:* Of the 267 charts that had a documented HIV test, 176 (66%) had a test ordered by the service unit with the result in the chart, but not recorded in RPMS. This type of data entry error is the result of either omission or miscoding. Ninety-one (34%) charts had prenatal HIV tests that had been

faxed or e-mailed to the service unit by a previous prenatal provider (usually another IHS facility) that had not been entered into RPMS.

In sum, according to GPRA, the testing rate of the patients in this sample was 0% (0/598). However, with exclusions from the denominator of women who did not need to be tested (not pregnant, miscarriage, declined testing), and additions to the numerator (women who were tested, but the result was not recorded), the true testing rate in this sample was 53% (267/507).

## Limitations

This project did not seek to determine what proportion of data entry errors were a result of laboratory tests done off site and not entered into RPMS (the time period of chart review preceded the release of the reference laboratory interface), lack of data entry, or data miscoding. Similarly, the reasons for clinical gaps are often not apparent in chart review, and so we relied on qualitative data to attempt to determine the reasons for misses. Qualitative data cannot be extrapolated to determine precisely the contributions of different

categories of apparent clinical or data-related misses, only the range of types and underlying causes of misses.

The sample was weighted towards larger facilities, which may under-represent the types of misses seen at smaller facilities.

## Discussion

Sites with the best performance often had protocols in place that tended to include HIV screening by default. These protocols included 1) testing as soon as possible in pregnancy, ideally immediately upon discovery of a positive pregnancy test, by the same nurses who performed the pregnancy test; 2) using opt-out methods to make an HIV test as routine as the other tests done during prenatal care; and 3) bundling HIV testing into a prenatal panel rather than ordering the test separately, either by pre-marking lab order forms or as the default order code with a contract lab. These safeguards effectively extend the opt-out principle to provider behavior, ensuring that the provider screens for HIV unless he or she actively withdraws the test. In this sample, bundling HIV with other routine prenatal infectious disease tests would have prevented most missed opportunities. Opt-out needs to be emphasized, as 5 of 27 (18.5%) service units in this sample were still not using opt-out, and instead used written consent.

The primary reason for apparent GPRA misses is not a lack of testing but rather data integrity. Patients in this sample had a screening rate according to GPRA of 0%, when in fact it was over 50%. Most facilities assumed, often correctly, that low prenatal HIV screening rates were data errors, with two detrimental effects: 1) low GPRA rates demoralized medical staff who felt they were performing better than the data indicated, and 2) data entry errors made identifying and rectifying clinical errors difficult. Once a site understood it had a proportion of clinical misses, they were generally quick to react and close the gaps. Many sites with low rates quickly realized double-digit gains in screening rates once they instituted some of the aforementioned clinical and data safeguards. Most notable was a large hospital seeing hundreds of prenatal patients each year that increased its score from 1% to 88%. It is critical that providers have data on key screening results and understand the reasons underlying those rates in order to take effective action.

## Recommendations

Clinical practice:

1. Ensure all staff understand opt-out testing, including contract workers.
2. Ensure HIV is bundled into a larger prenatal test panel.
3. Offer prenatal panel in the first visit -- the same visit as HCG+ result.
4. Make HIV test the default option unless the patient declines. If still using hard copies to order laboratory panels, pre-mark the master copy of intake slips with

the routine prenatal ID tests.

5. Ensure women who present in term labor with no testing history are screened for HIV.
6. Consider testing for a second time during the 3rd trimester of pregnancy as per CDC guidelines in high-risk communities.
7. Ensure service units have a clear plan, including medical and social referrals, in the case of a positive HIV test result.

RPMS/ Data entry

8. Link reference laboratory directly to RPMS for automatic data entry, using the reference laboratory interface software application. If this is not possible, ensure sent out laboratory tests are entered into PCC as historical lab tests so they can be counted by CRS for GPRA reporting.
9. Review the standard ways that CRS looks for HIV testing results, and ensure that your medical staff is aware of the appropriate ways to record HIV testing data in RPMS.
10. Ensure the CRS taxonomy for HIV screens (i.e., BGP HIV TEST TAX) includes all HIV screening lab tests that are used at the facility.
11. In hard charts, standardize the location for HIV test results, and ensure that results are entered into the laboratory file.
12. Enter HIV tests from other facilities into RPMS. IHS is looking into ways to streamline this process for service units, similar to recording immunizations done at other facilities.

## Additional resources

CRS website: <http://www.ihs.gov/cio/crs/>

GPRA website: <http://www.ihs.gov/NonMedicalPrograms/PlanningEvaluation/pe-gpra.asp>

Performance Improvement Toolbox: [https://webmail.hhs.gov/exchweb/bin/redirect.asp?URL=http://www.ihs.gov/cio/crs/crs\\_performance\\_improvement\\_toolbox.asp](https://webmail.hhs.gov/exchweb/bin/redirect.asp?URL=http://www.ihs.gov/cio/crs/crs_performance_improvement_toolbox.asp)

## References

1. Peters V, Kai-Lih L, Dominguez K, et al. Missed opportunities for perinatal HIV prevention among HIV-exposed infants born 1996-2000, pediatric spectrum of HIV disease cohort, *Pediatrics*. 2003; 111(5):1186-1191.
2. Wade N, Birkhead G, Gourlay-Doyle M, et al. Perinatal HIV transmission rates among HIV-infected pregnant women in New York State [Abstract 708] In: Program and abstracts of the 7<sup>th</sup> Conference on Retroviruses and Opportunistic Infections. Alexandria, VA: Foundation for Retrovirology and Human Health, 2000.
3. Dunn DT, Peckham CS, Semprini AE, Pardi G.

Vertical transmission of HIV-1: maternal immune status and obstetric factors. The European Collaborative Study. *AIDS*. 1996;10:1675.

4. Pregnancy and Childbirth, CDC website, <http://www.cdc.gov/hiv/topics/perinatal>. Accessed October 3 2007.
5. Pitt J, Brambilla D, Reichelderfer P, et al. Maternal and immunologic and virologic risk factors for infant human immunodeficiency virus type 1 infection: Findings from the Women and Infants Transmission Study. *J Infect Dis*. 1997;175:567-75.
6. Public Health Service Task Force. Recommendations for use of antiretroviral drugs in pregnant HIV-1-infected women for maternal health and interventions to reduce perinatal HIV-1 transmission in the United States. Available at <http://aidsinfo.nih.gov/ContentFiles/PerinatalGL.pdf>.
7. Cooper ER, Charurat M, Mofenson L, et al. Combination antiretroviral strategies for the treatment of pregnant HIV-1--infected women and prevention of perinatal HIV-1 transmission. *J Acquir Immune Defic Syndr*. 2002;29:484--94.
8. International Perinatal HIV Group. The mode of delivery and the risk of vertical transmission of human immunodeficiency virus type 1: a meta-analysis of 15 prospective cohort studies. *N Engl J Med*. 1999;340:977-87.
9. American College of Obstetricians and Gynecologists. Scheduled cesarean delivery and the prevention of vertical transmission of HIV infection. *Int J Gynaecol Obstet*. 2000;73:279-81.
10. World Health Organization. HIV and infant feeding: guidelines for decision-makers. Geneva, Switzerland: World Health Organization; 2003.
11. Connor EM, Sealing RS, Gleber R, et al. Reduction of maternal-infant transmission of human immunodeficiency virus type 1 with zidovudine treatment. *N Engl J Med*. 1994;331:1173-80.
12. CDC. US Public Health Service recommendations for human immunodeficiency virus counseling and voluntary testing for pregnant women. *MMWR*. 1995;44(No.RR-7):1-14.
13. Mak DB, Murray JC, Bulsara MK. Antenatal screening for sexually transmitted infections in remote Australia. *Aust NZ J Obstet Gynaecol*. 2003;43(6):457-62.
14. Tao G, Patterson E, Lee LM et al. Estimating prenatal syphilis and HIV screening rates for commercially insured women. *Am J Prev Med*. 2005;28(2):175-81.
15. Anderson JE, Koenig LJ, Lampe MA et al. Achieving universal HIV screening in prenatal care in the United States: provider persistence pays off. *AIDS Patient Care STDs*. 2005;19(4):247-52.
16. Schrag SJ, Arnold KE, Mohle-Boetani JC, et al.

Prenatal screening for infectious diseases and opportunities for prevention. *Obstet Gynecol*. 2003;102(4):753-60.

17. Royce R, Walter E, Fernandez I, et al. Barriers to universal prenatal HIV screening in 4 US locations in 1997. *AJPH*. 2001;91(5):727-733.
18. CDC RR US Public Health Service Recommendations for HIV screening of Pregnant Women. Perinatal Counseling and Guidelines Consultation. *MMWR*. 2001;50(RR-19):59-86.
19. Roome A, Hadler J, Birkhead G, et al. HIV Testing among Pregnant Women--United States and Canada, 1998-2001. *MMWR*. 2002;51(45):1013-1016.
20. Anderson JE, Sansom S. HIV testing among US women during prenatal care: findings from the 2002 National Survey of Family Growth. *Matern Child Health J*. 2006;10:413-417.

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# Assessment of Internet Access Across the Indian Health Service

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## Background

Health care communications is an essential part of the clinician and patient relationship. Good communication between the patient and the provider increases the patient's comprehension and self-management skills, improves adherence to treatment decisions, and leads to improved health outcomes.<sup>1,2,3</sup> Good health care communication has a significant and positive impact on patient satisfaction and medical costs, and reduces the likelihood of a physician experiencing a malpractice claim.<sup>4,5,6,7,8</sup>

Improvement of health care communication is an objective of Healthy People 2010, a nationwide health promotion and disease prevention plan with goals to increase quality and years of healthy life and to eliminate health disparities. It is a framework that is composed of 28 focus areas and related objectives. Healthy People 2010 Goal 11-1 aims to increase the proportion of households with Internet access at home. The increase in the use of the Internet is becoming more integrated by business organizations and consumers, and its use creates a new potential medium of communication between health care organizations, patients, and clinicians. Although increasing in many areas of the United States,<sup>9</sup> there are few data available on the number of American Indians and Alaska Natives (AI/AN) who have Internet access.

To assess Internet access for AI/AN patients, a new data field was added in February 2007 to the Patient Registration package, (version 7.1, patch 2). This is a component of the Resource and Patient Management System (RPMS), the clinical information system used by the majority of IHS facilities. Patient registration clerks are prompted to ask patients if they have access to the Internet. If the patient confirms that they can access the Internet, the registration clerk asks a second question: where is the Internet accessed (from home, work, school, health care facility, library, or tribal/community center)? This information is then documented in the patient's medical record (see Figure 1).

**Figure 1. Sample Patient Registration Screen for collecting Internet access information**

```
IHS REGISTRATION EDITOR (page 1)                                HOSPITAL
=====
=====
DOE, JOHN                                                       (upd:APR 16, 2008) HRN:000000
=====
1. ELIGIBILITY STATUS :
2. DATE OF BIRTH :
3. PLACE OF BIRTH [CITY] :
4. ST :
5. SEX :
6. SOCIAL SECURITY NUMBER :
7. MARITAL STATUS :
8. CURRENT COMMUNITY :
-----
9. STREET ADDRESS [LINE 1] :
10. STREET ADDRESS [LINE 2] :
11. STREET ADDRESS [LINE 3] :
12. CITY :
13. ST :
14. ZIP CODE :
15. LOCATION OF HOME :
-----
16. PHONE NUMBER [RESIDENCE] :
17. WORK PHONE :
18. OTHER PHONE :
19. INTERNET ACCESS : YES WHERE : HOME (upd AUG 9,2007)
-----
CHANGE which item? (1-19) NONE//: 19
CAN YOU ACCESS THE INTERNET: yes YES
ACCESS THE WEB FROM: ??

Choose from:
H HOME
W WORK
S SCHOOL
HC HEALTH CARE FACILITY
L LIBRARY
T TRIBAL/COMMUNITY CENTER
ACCESS THE WEB FROM:
```

## Methods

The Tally of Patient Internet Access is a new RPMS management report that retrieves the number and percentage of patients who were screened for Internet access through the RPMS patient registration system. Results are displayed by gender, age, and community (see Figure 2) for a selected time-period. Although the report has national importance, it is generated at the local level. Since the data from this report provide essential information for health care planning within the IHS, a letter was distributed to each of the twelve IHS Areas in November 2007 requesting voluntary submission of the PINT report for inclusion in an aggregated national report on patient access to the internet. Uses for these data include:

- Assisting the CDC in collecting information for the Healthy People 2010 report. Goal 11-1 is updated by the CDC from the National Household Education Survey. We believe that our data will be more accurate for the IHS population than the survey currently in use.
- Assisting the IHS Office of Information Technology in prioritization and identification of appropriate direction for the development of future health information tools such as Personal Health Records (PHR).
- Assisting the IHS Health Education program in identification of potential resources for increasing consumer access to health education materials.
- Assisting the IHS Health Literacy program in identification of resources for improving consumer health literacy.

## Results

More than 75 sites screened 356,748 patients for Internet access, representing 23.8 percent of the IHS user population of 1.5 million. From those patients who were assessed, 20.9 percent (n=74,560) had access to the Internet at home, work, library, or tribal/community center. When further stratified by geographical area, the greatest Internet access was observed in locations that are closer to urban centers and information technology resources such as Portland, Phoenix, and the Oklahoma Area (reporting Internet access rates of 37, 28.6, and 30.8 percent, respectively). Areas that are predominantly rural such as Alaska, Navajo, and Aberdeen reported having the lowest rates (5.1, 16, and 15.5 percent). Details pertaining to the location, (home, work, school, health care facility, library, or tribal/community center), where the Internet is accessed were not examined at this time.

## Discussion

The 2004 Nielsen/NetRatings, a marketing and research firm, reported that 3 out of 4 Americans have Internet access, with more than 50% being broadband connections.<sup>10</sup> Results from the 2003 Census report show that 54.7% of Americans can access the Internet from home.<sup>11</sup> The number of AI/ANs

who have access to the Internet was not provided in these reports. These reports are in contrast to the results collected by the IHS through the RPMS PINT report that shows significantly lower rates of Internet access for AI/ANs as compared to the national data.

Barriers to Internet access listed in the Healthy People 2010 report include cost of Internet service, lack of service, limited literacy, lack of familiarity with different technologies (especially for those with disabilities), and inaccessible formats that limit appropriate and effective technology use. These are all potential reasons for the dramatic difference between reported access for the general population (3 in 4 people having Internet access) and those who seek health care services at IHS locations (1 in 5 people having Internet access).

These data further highlight the need for initiatives to increase universal access to the Internet especially for AI/AN populations living in rural areas.

**Figure 2. Sample Patient Internet Access Report (PINT)**

*** PATIENT INTERNET ACCESS ***			
Date Report Run: Nov 02, 2007			
Site where Run: TEST HOSPITAL			
Report Generated by: JOHN SMITH			
Internet Access as of Date: Oct 01, 2007			
-----			
PATIENTS INCLUDED IN THIS REPORT:			
All Patients: AI/AN Only (Classification 01)			
All Communities Included.			
-----			
Total # of Patients	16,842		
Total # w/Internet Access Screening	6,141	36%	
# with Internet Access w/% of those screened	2,155	35%	
GENDER BREAKDOWN:			
# Females w/Internet access			
with % of those with access	1,271	59%	
# Males w/Internet access			
with % of those with access	884	41%	
-----			
AGE BREAKDOWN:			
# < 18 yrs old w/Internet access			
with % of those with access	691	32%	
# 18-35 yrs old w/Internet access			
with % of those with access	617	29%	
# 36-55 yrs old w/Internet access			
with % of those with access	648	30%	
# > 55 yrs old w/Internet access			
with % of those with access	199	9%	
-----			
COMMUNITY BREAKDOWN: (w/ % of total with access)			
End of report			

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## References

1. US Department of Health and Human Services. Communicating Health: Priorities and strategies for progress. Washington, DC, July 2003.
2. Greenfield S, Kaplan S, Ware JE Jr. Expanding patient involvement in care: effects on patient outcomes. *Ann Intern Med.* 1985;102:520-28.
3. Hall JA Roter DL, Katz NR. Meta analysis of correlates of provider behavior in medical encounters. *Med Care.* 1988, 26, 657-75.
4. Wiggers JH, Donovan KO, Redman S, et al. Cancer patient satisfaction with care. *Cancer.* 1990;66:610-16.
5. Stewart MA. Effective physician-patient communication and health outcomes: a review. *Can Med Assoc J.* 1995;152:1423-33.
6. Levinson W, Roter DL, Mullooly JP, et al. Physician-patient communication: The relationship with malpractice claims among primary care physicians and surgeons. *JAMA.* 1997;277:553-59.
7. Brody DS, Miller SM, Lerman CE, et al. The relationship between patients' satisfaction with their physicians and perceptions about interventions they desired and received. *Med Care.* 1989;27:1027-35.
8. Tamblyn R, Abrahamowicz M, Dauphinee D, et al. Physician scores on a national clinical skills examination as predictors of complaints to medical regulatory authorities. *JAMA.* 2007 Sep 5;298(9):1057-9.
9. Healthy People 2010 Healthcare Communications. Available at: [www.healthypeople.gov/data/midcourse/html/focusareas/FA11ProgressHP.htm](http://www.healthypeople.gov/data/midcourse/html/focusareas/FA11ProgressHP.htm). Accessed on April 8, 2008.
10. Nielsen Netratings 2003 Report. Available at: [http://www.nielsen-netratings.com/pr/pr\\_040318.pdf](http://www.nielsen-netratings.com/pr/pr_040318.pdf). Accessed on April 8, 2008.
11. U.S. Census Data. Available at: <http://www.census.gov/prod/2005pubs/p23-208.pdf>. Accessed on April 8, 2008.



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This is a page for sharing “what works” as seen in the published literature, as well as what is being done at sites that care for American Indian/Alaskan Native children. If you have any suggestions, comments, or questions, please contact Steve Holve, MD, Chief Clinical Consultant in Pediatrics at [sholve@tcimc.ihs.gov](mailto:sholve@tcimc.ihs.gov).

## IHS Child Health Notes

### Quote of the month

“The beginning is the most important part of any work.”

Plato

### Introduction

This spring and summer most IHS clinics have had requests for blood lead level testing for children entering Head Start. This is an attempt to explain why blood level testing is mandatory for Medicaid eligible AI/AN children even if the risk of elevated lead levels is likely small in our patients.

### Blood Lead Screening in American Indian/Alaska Native Children

In March 2008 the Office of Head Start issued an Information Memorandum that reaffirmed the requirement within the Head Start Program Performance Standards for all children entering the program to be screened for lead poisoning as per the schedule of well child care utilized by the EPSDT program.<sup>1</sup> It appeared that many Head Start programs that serve American Indian/Alaska Native (AI/AN) children were encountering difficulty in obtaining documentation of the required screening blood lead levels (BLLs) performed at 12 and 24 months of age. The Health Director of the IHS Head Start Program asked the Indian Health Service for guidance on this issue. This request prompted a review of current standards for screening BLLs in children < 6 years old.

Lead is a potent neurotoxin. At higher levels (>70ug/dL) lead poisoning can cause encephalopathy and death. Such extreme lead toxicity is now rare as primary prevention efforts in the past few decades mandated the removal of lead from gasoline and consumer products. Lead exposure from paint in older buildings remains a persistent source of exposure to lead. Recently there has been concern over lead toxicity in toys imported from China. Unfortunately, even small amounts of lead can have irreversible effects on brain development in young children. It is estimated that every 10ug/dL increment in BLLs can decrease IQ scores by 3 to 7 points.<sup>2</sup> At present, the accepted definition for elevated BLLs is >10ug/dL. However, there is recent research that BLLs even below 10ug/dL may be deleterious.<sup>3</sup> Since BLLs <25ug/dL are clinically undetectable, only screening can detect these cases.

Who should be screened for lead exposure? Data show

that lead poisoning is overwhelmingly a disease of young children in poverty. In the NHANES III survey in 1994, the overall prevalence of elevated BLLs (>10ug/dL) in 1 - 5 year olds was 4.4%. However, the prevalence of elevated BLLs was only 0.9% in upper income children, while the rate was as high as 21% in poor children who lived in older homes. Further analysis showed that 10% of children enrolled in Medicaid had elevated BLLs. Medicaid enrollees also accounted for 60% of the total children with BLL >10ug/dL and 83% of the children with BLLs >20ug/dL.<sup>4</sup>

Many AI/AN children potentially would fall into the high-risk group because of widespread poverty in many AI/AN communities. However, few AI/AN communities have commercial homes built before the 1950s, which would tend to diminish the likelihood of exposure to lead paint.

The current prevalence of elevated BLLs in AI/AN children is unclear. A review of *Pubmed* for the past 20 years with the search terms, “American Indian,” “children,” and “lead” disclosed only one article on mining exposures in Oklahoma. The IHS has unpublished data from the mid 1990s on lead levels in 7 of 12 Areas. The percentage of children screened in each Area varied widely, and not all tribal groups were included. However, in this limited data set the overall rate of elevated BLLs after confirmatory testing was < 1%, which was lower than the national rate.

Given the low prevalence of lead poisoning in AI/AN children tested, it was agreed that targeted screening of AI/AN children at high risk for lead exposure was a better strategy than universal testing. Universal testing was also discouraged by the United States Preventive Services Task Force.<sup>5</sup> No lead screening or targeted lead screening became the standard in most clinics, but was never explicitly made a policy for the IHS. A summary of the costs and benefits of lead screening in AI/AN children was published in *The IHS Primary Care Provider* in 1994.<sup>6</sup>

An informal survey of IHS/Tribal/Urban (I/T/U) clinics suggests that most practitioners have assumed that lead exposure is not a problem in their communities. This lack of lead screening is hardly unique for I/T/U clinics. Despite the demonstrated elevated risk in poor children, only 20% of Medicaid enrollees nationwide were screened for BLLs in a recent evaluation by the Office of the Inspector General.<sup>7</sup>

However, a review of federal standards indicates BLL

testing is a *mandated* service for *all* children eligible for Medicaid and Head Start. The Center for Medicaid and Medicare Services (CMS) requires that all Medicaid-eligible children receive a screening blood test at 12 months and 24 months of age.<sup>8</sup> Children between the ages of 36 to 72 months must also have a BLL test if lead screening has not been done previously. Head Start is also required to follow the standard of care set forth by CMS. CMS made this decision based on the demonstrated risk of elevated BLL in Medicaid enrollees compared to the general population.

Data show that up to 80% of AI/AN children < 6 years of age in reservation communities are eligible for Medicaid and Head Start. With this high percentage of Medicaid enrollees, it is likely more efficient to screen all AI/AN children < 6 years old for elevated BLLs. The risk of elevated BLLs in AI/AN children is likely low, but there are no recent, comprehensive data, and there are no data that include all tribal groups.

Given the high incidence of iron deficiency anemia in AI/AN children, many I/T/U clinics already screen for anemia with a complete blood count (CBC) at 9 months and 18 months. Testing at 9 months is preferable to testing at 12 months, as this will result in the earlier detection of iron deficiency anemia and earlier treatment. It is also known that iron deficiency promotes lead absorption, and that repletion of iron stores will diminish absorption of lead.<sup>9,10</sup> Therefore, timely treatment of iron deficiency is one of the best preventive measures to minimize lead poisoning. BLLs tend to peak at age 24 months, so this is the optimal time for the follow-up test to be done. To minimize the number of blood draws, CBC and lead testing could be combined in the following schedule:

- 9 - 12 months: draw a CBC and lead level
- 24 months: draw a CBC and lead level
- 36 - 72 months – draw a lead level if not done previously

Management of elevated BLLs (>10ug/dL) is beyond the scope of this report. Follow-up should be based on the guidelines published in the AAP policy statement on lead poisoning published in 2005.<sup>2</sup>

Lead testing will cost I/T/U sites money. This test is usually performed in a reference lab, and a BLL usually costs about \$15. Medicaid pays a global fee for outpatient visits to most I/T/U clinics, so the cost of the test is not recoverable. However, BLL is a CMS mandate: failure to perform a mandated test could jeopardize Medicaid reimbursement. Money may need to be reprogrammed to I/T/U laboratory budgets to cover this cost.

Lastly, each clinic will need to track BLLs in their patient population over the next year. This will let us answer the question, Which, if any, AI/AN children are at risk for lead poisoning? Tribal groups with low lead levels may be able to request a waiver of BLL testing from CMS in the future. As important, if some tribal groups are found to be at elevated risk, appropriate environmental investigation and amelioration

can begin.

## References

1. Lead Screening ACF-IM-HS-08-07. Administration for Children and Families. U.S. Department of Health and Human Services. Issued 3/20/08. [www.acf.hhs.gov/programs/ohs/policy/im2008/acfim\\_hs\\_08\\_07.html](http://www.acf.hhs.gov/programs/ohs/policy/im2008/acfim_hs_08_07.html).
2. Lead Exposure in Children: Prevention, Detection and Management. American Academy of Pediatrics Policy Statement. *Pediatrics*. 2005 Oct;116(4):1036-1046.
3. Canfield RL, Henderson CRjr, Cory-Slechta DA, et al. Intellectual impairment in children with blood concentrations below 10ug per deciliter. *N Eng J Med*. 2003;348:1517-1526.
4. Recommendations for blood lead screening of young children enrolled in Medicaid: Targeting a group at high risk. *MMWR*. December 08, 2000/49(RR14);1-13.
5. USPSTF Recommendations for Lead Screening. *Pediatrics*. 2006;118:e2514-2518.
6. Batholomew M Vanderwagen C. Lead screening of Native American children: targeted or screening? *The IHS Primary Care Provider*. 1999 August 24(8):125-126.
7. Lead Poisoning: Federal Health Care Programs are not Effectively Reaching At-Risk Children. U.S. General Accounting Office, January 1999.
8. EPSDT Benefits: Accessed on June 12, 2008 [http://www.cms.hhs.gov/MedicaidEarlyPeriodicScrnl/02\\_Benefits.asp](http://www.cms.hhs.gov/MedicaidEarlyPeriodicScrnl/02_Benefits.asp).
9. Barton JC, Conrad ME, Nuby S, Harrison L. Effects of iron on the absorption and retention of lead. *J Lab Clin Med*. 1978 Oct;92(4):536-47.
10. A Bradman, B Eskenazi, P Sutton, et al. Iron deficiency associated with higher blood lead in children living in contaminated environments. *Environ Health Perspect*. 2001 October; 109(10):1079-1084.

## Infectious Disease Updates.

### Steve Holve, MD

Pentacel®: New May not be Better for American Indian/Alaska Native Infants.

A new combination vaccine, Pentacel® (DTaP-IPV- Hib [PRP-T]), was recently licensed for use in the US. This vaccine is not ideal for American Indian/Alaska Native (AI/AN) infants served in federal, tribal, and urban Indian clinics.

Pentacel® is a vaccine that protects against five serious infections: diphtheria, tetanus, pertussis, polio, and haemophilus influenzae type b (Hib). It is the first combination vaccine in the US that includes both poliovirus

and haemophilus antigens. The vaccine is administered to children at 2, 4, 6, and 15-18 months of age.

There are currently several Hib vaccines available that vary in the protein used to make the vaccine more immunogenic. In Pentacel®, the Hib component of the vaccine is a purified polyribosylribitol phosphate (PRP) capsular polysaccharide covalently bound to tetanus protein (PRP-T). The current Hib vaccine recommended for AI/AN infants has a meningococcal outer membrane protein (OMP) bound to the PRP molecule, and is designated as a PRP-OMP Hib vaccine.

The Redbook of the American Academy of Pediatrics recommends that for AI/AN infants, the first dose of a Hib conjugate vaccine should contain PRP-OMP. For AI/AN infants “the administration of a PRP-OMP-containing vaccine leads to more rapid seroconversion to protective concentrations of antibody within the first 6 months of life, and failure of use has been associated with excess cases of Hib disease in young infants in this population.”<sup>1</sup>

In 1996 Alaska switched from a PRP-OMP Hib vaccine to combination HbOC-DTP vaccine (Tetramune®). During 1996 - 1997, 17 Hib cases occurred in Alaska Native children <5 years of age, increasing the rate of Hib disease from 19 to 91 cases per 100,000 per year. Eight of the cases occurred in partially vaccinated children who had received 1 or 2 doses of HbOC. Since 2001, Alaska has adopted a schedule using PRP-OMP alone, and the subsequent rate of Hib disease in Alaska Native infants decreased to 5.4 per 100,000 per year.<sup>2</sup>

Physicians, pharmacists, and immunization coordinators who work for federal, tribal and urban Indian clinics need to be aware of this change and insure that their state’s VFC program continues to supply a PRP-OMP Hib vaccine to their AI/AN patients.

## References

1. Report of the Committee on Infectious Diseases. American Academy of Pediatrics; Elk Gove, IL page 89.
2. Singleton et al. The Alaska *Haemophilus influenzae* type b experience: Lessons in controlling a vaccine-preventable disease. *Pediatrics*. 2006;118:421-429.

## Addendum

Questions have arisen about whether this recommendation applies to all AI/AN children. The above update was written for an audience that works in federal, tribal, and urban Indian clinics. Private clinics near reservation communities may serve significant numbers of AI/AN patients and may wish to have a PRP-OMP containing Hib vaccine available. The risk of invasive Hib disease for AI/AN infants who do not live on or near reservation communities is unknown.

This issue of increased risk for invasive Hib disease was addressed in the *MMWR* in December 2007 due to a decrease in the supply of PRP-OMP Hib vaccine due to production

difficulties. The pertinent summary of the risk for AI/AN infants is below. Each practitioner should make a decision based on their assessment of risk of invasive Hib for their patients. The full posting with references is available at <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5650a4.htm>.

AI/AN children also are at increased risk for Hib disease, particularly in the first 6 months of life. Before the use of Hib conjugate vaccines, the incidence of Hib disease among young AI/AN children in AI/AN communities was approximately 10 times higher than among children of comparable age in the general population. Compared with PRP-TT conjugate vaccines, the administration of PRP-OMP vaccines leads to a more rapid seroconversion to protective antibody concentrations within the first 6 months of life. Failure to use PRP-OMP vaccines for the first dose is associated with excess cases of Hib disease in AI/AN infants living in communities where Hib transmission is ongoing and exposure to colonized persons is likely. Although PRP-OMP and PRP-TT vaccines are equally effective after completion of the primary series, availability of more than one Hib vaccine in a clinic could lead to administration of the wrong vaccine for the first dose in these populations. For these reasons, CDC recommends that providers who currently use PRP-OMP-containing Hib vaccines (PedvaxHIB and Comvax) to serve predominantly AI/AN children in AI/AN communities continue to stock and use only PRP-OMP-containing Hib vaccines not affected by the recall and vaccinate according to the routinely recommended schedules, including the 12 - 15 month booster dose. In its vaccine stockpile, CDC has PRP-OMP-containing Hib vaccines not affected by the recall and will prioritize distribution of available PRP-OMP vaccines for use in AI/AN communities. AI/AN children not in AI/AN communities or who already receive PRP-TT conjugate vaccines should continue to be vaccinated with available vaccines according to the routinely recommended schedules, including the 12 - 15 month booster dose.

## Recent literature on American Indian/Alaskan Native Health

### Michael L. Bartholomew, MD

Brim SN, Rudd RA, Funk RH, Callahan DB. Asthma prevalence among US children in underrepresented minority populations: American Indian/Alaska Native, Chinese, Filipino, and Asian Indian. *Pediatrics*. 2008 Jul;122(1):e217-22. [http://www.ncbi.nlm.nih.gov/pubmed/18595967?ordinal\\_pos=1&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed\\_Resul tsPanel.Pubmed\\_RVDocSum](http://www.ncbi.nlm.nih.gov/pubmed/18595967?ordinal_pos=1&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_Resul tsPanel.Pubmed_RVDocSum)

Asthma continues to be a prevalent childhood disease in the US. Recent studies estimate that 8.9% of US children ages 0 to 17 years of age have asthma.<sup>1</sup> Asthma prevalence among Asian Americans, specifically subgroups of Asian Americans, and American Indians and Alaska Natives (AI/AN) has largely been unknown.

Anecdotal reports of the 1960s and 1970s suggested that

asthma in American Indians was rare.<sup>2</sup> In the 1990s, Clark et al showed that asthma was more prevalent than once believed when he documented the asthma burden in the Jemez Indian childhood population.<sup>3</sup> Between 2004 - 2005, the prevalence of asthma in AI/AN children was estimated to be 9.9%.<sup>1</sup>

Many recent studies defining asthma prevalence rates among children have yielded varied results in regards to age, race, and socioeconomic and ethnic backgrounds. Due to small sample sizes in large scale studies, the national prevalence of diseases has thus far been difficult to determine for certain ethnic groups or subgroups.

This study investigates the prevalence of current asthma, lifetime asthma, and asthma attacks among subpopulations (Chinese, Filipino, and Asian Indian) of Asian American and AI/AN children ages 2 to 17 years and place of birth by analyzing aggregate data from the 2001 - 2005 National Health Interview Surveys. The prevalence of lifetime and current asthma and the prevalence of 12-month asthma attacks were calculated from responses to questions posed during the survey. Logistic regression models were used to determine the association of current asthma prevalence with race and place of birth by controlling for certain confounding demographic variables.

Estimates of current asthma prevalence according to race and place of birth ranged from 4.4% for Asian Indian children to 13.3% in black children. AI/AN children had an asthma prevalence of 13.0%, while Filipino and Chinese children had a prevalence of 10.7% and 5.1%, respectively. White children had a current asthma prevalence of 8.4%. Lifetime asthma prevalence estimates among races showed a similar trend. The lifetime prevalence among the races ranged from 9% in Chinese children to 18.1% for black children. The lifetime asthma prevalence estimates for AI/AN children was 18% and for Asian Indian and Filipino was 9.4% and 15.7% respectively. A higher prevalence of current and lifetime asthma was noted in children born in the US than in children born outside the US (current asthma: 9.4% vs. 4.3%; lifetime asthma: 13.6% vs. 7.3%). The prevalence of asthma attack in the past 12 months did not vary among races or place of birth.

After controlling for place of birth, gender, age, ethnicity, region, household income, and health insurance coverage, AI/AN children are 1.82 times more likely to report having asthma than their White counterparts. Black children are 1.57 times more likely, while Filipino children are 1.64 times more likely. Additionally, children born inside the US were twice as likely to report having asthma as children born outside the US.

This study is not without limitations. The authors cite small sample sizes of the study populations to be problematic, requiring aggregate data for 5 years to provide limited statistical power. There is also the potential for selection bias since the survey was administered in either the English or Spanish language. Lastly, additional risk factors (BMI and environmental tobacco smoke exposure) for asthma were not analyzed due to lack of inclusion in the survey model. Despite

these limitations, the authors concluded that the results support previous assertions that certain ethnicities including black, AI/AN, and Filipino children as well as those born in the US tend to have a disproportionately higher prevalence of asthma.

## References

1. Akinbami L. Centers for Disease Control and Prevention, National Center for Health Statistics. The state of childhood asthma, United States, 1980-2005. *Adv Data*. 2006;(381):1-24.
2. Galloway JM, Goldberg BW, Alpert JS. 1999. *Primary Care of Native American Patients: Diagnosis, Therapy, and Epidemiology*. Boston: Butterworth-Heinemann
3. Clark D, Gollub R, Green WF, et al. Asthma in Jemez Pueblo schoolchildren. *Am J Respir Crit Care Med*. 1995 May;151(5):1625-7.



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The Chief Clinical Consultant's Newsletter (Volume 6, No. 7, July 2008) is available on the Internet at <http://www.ihs.gov/MedicalPrograms/MCH/M/OBGYN01.cfm>. We wanted to make our readers aware of this resource, and encourage those who are interested to use it on a regular basis. You may also subscribe to a listserv to receive reminders about this service. If you have any questions, please contact Dr. Neil Murphy, Chief Clinical Consultant in Obstetrics and Gynecology, at [nmurphy@scf.cc](mailto:nmurphy@scf.cc)

## OB/GYN Chief Clinical Consultant's Corner Digest

### Does a PICC line facilitate treatment of hyperemesis gravidarum?

*Objective:* The objective of the study was to evaluate the use of interventions such as a peripherally inserted central catheters (PICC) lines or nasogastric (NG)/nasoduodenal (ND) tube with the use of medications alone in the management of pregnancies with hyperemesis.

*Study Design:* Subjects were identified with confirmed intrauterine pregnancy, admitted with hyperemesis gravidarum (HEG) between 1998 and 2004. Medical records were then abstracted for information with regard to therapy. Subjects were assigned on the basis of the management plan: medication alone, PICC line, or NG/ND tube. Outcomes were compared between groups.

*Results:* Ninety-four patients met study criteria and had complete outcome data available. Of those, 33 had a PICC line placed (35.1%), 19 had a NG/ND placed (20.2%), and 42 were managed with medication alone (44.7%). These groups were similar with respect to gestational age at delivery, Apgar score, and mean birthweight. Maternal complications were significantly higher among those with PICC lines. Of patients managed with PICC lines, 66.4% ( $P < .001$ ) required treatment for infection, thromboembolism, or both. Adjusted odds ratio for a PICC line complication was 34.5 (5.09, 233.73).

*Conclusion:* Maternal complications associated with PICC line placement are substantial despite no difference in neonatal outcomes, suggesting that the use of PICC lines for treatment of HEG patients should not be routinely used.

### OB/GYN CCC Editorial Comment 66.4% of women managed with a PICC line required treatment for thromboembolism or infection, or both.

Holmgren et al conclude that enteral feeding for women with hyperemesis gravidarum is safer than parenteral feeding and is accepted by patients. Obstetricians should make every effort to use enteral feeding for women with hyperemesis gravidarum and persistent weight loss. For a more complete discussion about management options for hyperemesis gravidarum, please review the answer to this month's Medical

Mystery Tour. Another possible resource can be found in T. Murphy Goodwin, MD's OBG Management discussion, link below.

Holmgren et al expands on the observations of previous authors who have pointed out the numerous complications of PICC line access for parenteral nutrition during pregnancy. The vast majority of such interventions during pregnancy are for the diagnosis of HEG. That some form of nutritional supplementation is needed for women who experience persistent weight loss with hyperemesis is clear. Although it is rare, maternal mortality still does occur and comes almost exclusively from this group of women. The same is true for major maternal morbidity such as Wernicke's encephalopathy.

Fetal effects such as growth restriction are limited to women who have HEG who also lose weight. Apart from growth restriction, which can be recognizable at birth, substantial data in both humans and experimental animals suggest adverse consequences later in life as a result of maternal calorie restriction for even a few months of pregnancy. Interestingly, in this study, there were no SGA infants in either the group treated with medication alone or the group managed with NG/ND tube placement.

The major complications of peripheral and central venous access for nutrition in pregnancy are thrombosis and infection, and the prevalence is now well established to be around 50%. Maternal death from complications of line access has also been reported.

This study is important because it represents the largest report of women who have received total nutritional support via an enteral feeding tube. Previous reports were limited to single cases or small series. There is little evidence indicating that the better safety record of enteral feeding and greater efficacy compared with parenteral feeding via a PICC line have led to increased usage. In our own survey of 792 women who self-reported hyperemesis gravidarum from 2000 to 2004, 16.7% reported parenteral nutrition, compared with only 2.3% who reported enteral tube feeding. It is hoped that this study will help reverse this ratio.

Have you taken advantage of the free Perinatology Corner

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CME/CEU module we offer on this topic? If not, this next part is definitely low hanging fruit. Just go to this module, review the material, answer a few quick questions, hit the submit button.

### Resources

Nausea and Vomiting in Pregnancy: Perinatology Corner Module

<http://www.ihs.gov/MedicalPrograms/MCH/M/PNC/NVP01.cfm>.

Holmgren C, Aagaard-Tillery KM, Silver RM, et al. Hyperemesis in pregnancy: an evaluation of treatment strategies with maternal and neonatal outcomes. *Am J Obstet Gynecol*. 2008;198:56.e1–56.e4. <http://www.ncbi.nlm.nih.gov/pubmed/18166306>.

Goodwin TM. Does a PICC line facilitate treatment of hyperemesis gravidarum? *OBG Management*. May 2008;Vol. 20, No. 05. [http://www.obgmanagement.com/article\\_pages.asp?aid=6143](http://www.obgmanagement.com/article_pages.asp?aid=6143).

### Scott Giberson, HQE

One of the guiding principles of the IHS HIV/AIDS Strategic Plan is to improve the collaborative nature and transparency of the program to maximize effectiveness. That said, we would like to share two recent announcements.

In April 2008, the IHS HIV Program and the Native Capacity Building Assistance Network (CBA), comprised of the Center for Applied Studies in American Ethnicity (CASAE), the Intertribal Council of Arizona (ITCA), and the National Native American AIDS Prevention Center (NNAAPC) signed a memorandum of understanding (MOU) to continue open communications, collaborate to raise awareness, and mutually augment efforts. This partnership demonstrates mobilization of both the Native community and IHS for HIV prevention efforts.

NNAAPC is offering and funding regional training grants to host trainings on a variety of HIV-related topics. This NNAAPC initiative will assist communities in capacity-building efforts from readiness to grant writing. Additional information is available from NNAAPC at <http://www.nnaapc.org/programs/regionaltraininggrants.htm>.

### Elaine Locke and Yvonne Malloy, ACOG

**“For American Indians, healthcare needs grow, money doesn’t.”**

Indian health staff were featured in an ACOG Today article about American Indian and Alaska Native women’s health care and the longstanding IHS/ACOG collaboration. The article pointed out the limited funding that IHS receives and the challenges encountered in providing care to a largely rural population with limited resources. The full front-page article, with lovely photos and quotes from several leaders in Indian women’s health, is available at <http://www.ihs.gov/MedicalPrograms/MCH/F/documents/Indian%20Health%20Services%20may%2008.pdf>.

### Haffner Native Women’s Health Award

The ACOG Committee on American Indian Affairs is raising money for a new award that would recognize an individual who has made a major contribution to improving the health care of American Indians/Alaska Natives. The William H. J. Haffner American Indian/Alaska Native Women’s Health Award is named after ACOG Fellow Dr. Haffner, an ob-gyn professor at the Uniformed Services University of the Health Sciences, Bethesda, Maryland. Dr. Haffner worked for the Indian Health Service for many years and has been involved with ACOG’s Indian health programs since their inception. To donate to the Haffner Award Fund, please make checks out to "ACOG" and mail to Yvonne Malloy, ACOG, 409 12th St. SW, Washington, DC 20024. <http://www.ihs.gov/MedicalPrograms/MCH/F/documents/Indian%20health%20award.doc>.

### Child Health

#### Obesity and type 2 diabetes risk in midadult life: the role of childhood adversity

*Results:* The risk of obesity increased by 20% to 50% for several adversities (physical abuse, verbal abuse, witnessed abuse, humiliation, neglect, strict upbringing, physical punishment, conflict or tension, low parental aspirations or interest in education, hardly takes outings with parents, and father hardly reads to child). Adversities with the strongest associations with adiposity (e.g., physical abuse) tended to be associated with glycosylated hemoglobin levels of  $\geq 6$ , but in most cases associations were explained by adjustment for adulthood mediators such as adiposity. Effects of other adversities reflecting less severe emotional neglect and family environment were largely explained by childhood socioeconomic factors.

*Conclusions:* Some childhood adversities increase the risk of obesity in adulthood and thereby increase the risk for type 2 diabetes. Research is needed to understand the interrelatedness of adversities, the social context of their occurrence, and trajectories from adversity to adult disease.

Thomas C, Hyppönen E, Power C. Obesity and type 2 diabetes risk in midadult life: the role of childhood adversity. *Pediatrics*. 2008 May;121(5):e1240-9. <http://www.ncbi.nlm.nih.gov/pubmed/18450866>.

### Chronic Disease

#### Intensive glucose control does not prevent major cardiovascular events in type 2 diabetes.

Two recent studies published in the NEJM addressing intensive glucose control in adults with type 2 diabetes failed to demonstrate a decrease in major cardiovascular events, although the second study did show a decrease in nephropathy.

### ACCORD Study Abstract

*Background:* Epidemiologic studies have shown a relationship between glycosylated hemoglobin levels and cardiovascular events in patients with type 2 diabetes. We

investigated whether intensive therapy to target normal glycosylated hemoglobin levels would reduce cardiovascular events in patients with type 2 diabetes who had either established cardiovascular disease or additional cardiovascular risk factors.

**Methods:** In this randomized study, 10,251 patients (mean age, 62.2 years) with a median glycosylated hemoglobin level of 8.1% were assigned to receive intensive therapy (targeting a glycosylated hemoglobin level below 6.0%) or standard therapy (targeting a level from 7.0 to 7.9%). Of these patients, 38% were women, and 35% had had a previous cardiovascular event. The primary outcome was a composite of nonfatal myocardial infarction, nonfatal stroke, or death from cardiovascular causes. The finding of higher mortality in the intensive-therapy group led to a discontinuation of intensive therapy after a mean of 3.5 years of follow-up.

**Results:** At 1 year, stable median glycosylated hemoglobin levels of 6.4% and 7.5% were achieved in the intensive-therapy group and the standard-therapy group, respectively. During follow-up, the primary outcome occurred in 352 patients in the intensive-therapy group, as compared with 371 in the standard-therapy group (hazard ratio, 0.90; 95% confidence interval [CI], 0.78 to 1.04;  $P=0.16$ ). At the same time, 257 patients in the intensive-therapy group died, as compared with 203 patients in the standard-therapy group (hazard ratio, 1.22; 95% CI, 1.01 to 1.46;  $P=0.04$ ). Hypoglycemia requiring assistance and weight gain of more than 10 kg were more frequent in the intensive-therapy group ( $P<0.001$ ).

**Conclusions:** As compared with standard therapy, the use of intensive therapy to target normal glycosylated hemoglobin levels for 3.5 years increased mortality and did not significantly reduce major cardiovascular events. These findings identify a previously unrecognized harm of intensive glucose lowering in high-risk patients with type 2 diabetes.

The Action to Control Cardiovascular Risk in Diabetes study group. Effects of intensive glucose lowering in type 2 diabetes. *N Engl J Med.* 2008 Jun 12;358(24):2545-2559. Epub 2008 Jun 6. PubMed Abstract: <http://www.ncbi.nlm.nih.gov/pubmed/18539917>.

Free Full Text: <http://content.nejm.org/cgi/content/full/358/24/2545?query=TOC>.

### ADVANCE Study Abstract

**Background:** In patients with type 2 diabetes, the effects of intensive glucose control on vascular outcomes remain uncertain.

**Methods:** We randomly assigned 11,140 patients with type 2 diabetes to undergo either standard glucose control or intensive glucose control, defined as the use of gliclazide (modified release) plus other drugs as required to achieve a glycosylated hemoglobin value of 6.5% or less. Primary end points were composites of major macrovascular events (death from cardiovascular causes, nonfatal myocardial infarction, or

nonfatal stroke) and major microvascular events (new or worsening nephropathy or retinopathy), assessed both jointly and separately.

**Results:** After a median of 5 years of follow-up, the mean glycosylated hemoglobin level was lower in the intensive-control group (6.5%) than in the standard-control group (7.3%). Intensive control reduced the incidence of combined major macrovascular and microvascular events (18.1%, vs. 20.0% with standard control; hazard ratio, 0.90; 95% confidence interval [CI], 0.82 to 0.98;  $P=0.01$ ), as well as that of major microvascular events (9.4% vs. 10.9%; hazard ratio, 0.86; 95% CI, 0.77 to 0.97;  $P=0.01$ ), primarily because of a reduction in the incidence of nephropathy (4.1% vs. 5.2%; hazard ratio, 0.79; 95% CI, 0.66 to 0.93;  $P=0.006$ ), with no significant effect on retinopathy ( $P=0.50$ ). There were no significant effects of the type of glucose control on major macrovascular events (hazard ratio with intensive control, 0.94; 95% CI, 0.84 to 1.06;  $P=0.32$ ), death from cardiovascular causes (hazard ratio with intensive control, 0.88; 95% CI, 0.74 to 1.04;  $P=0.12$ ), or death from any cause (hazard ratio with intensive control, 0.93; 95% CI, 0.83 to 1.06;  $P=0.28$ ). Severe hypoglycemia, although uncommon, was more common in the intensive-control group (2.7%, vs. 1.5% in the standard-control group; hazard ratio, 1.86; 95% CI, 1.42 to 2.40;  $P<0.001$ ).

**Conclusions:** A strategy of intensive glucose control, involving gliclazide (modified release) and other drugs as required, that lowered the glycosylated hemoglobin value to 6.5% yielded a 10% relative reduction in the combined outcome of major macrovascular and microvascular events, primarily as a consequence of a 21% relative reduction in nephropathy.

The ADVANCE collaborative group. Intensive blood glucose control and vascular outcomes in patients with type 2 diabetes. *N Engl J Med.* 2008 Jun 12;358(24):2560-2572. Epub 2008 Jun 6. PubMed Abstract: <http://www.ncbi.nlm.nih.gov/pubmed/18539916>.

Free Full Text: <http://content.nejm.org/cgi/content/full/358/24/2560>.

Commentary on both articles in the New England Journal of Medicine:

<http://content.nejm.org/cgi/content/full/358/24/2630>.

<http://content.nejm.org/cgi/content/full/358/24/2633>.

<http://content.nejm.org/cgi/content/full/358/24/2537>.

### New interactive site for clinicians serving women with disabilities

ACOG has released a recorded slide program, *Reproductive Health Care for Women with Disabilities*, which assists women's health care clinicians with office skills to assist with their care of women with physical, developmental, or sensory disabilities giving specific information for reproductive health care. Available now are the first two parts of a six part series. Part 1 includes an overview of the program, *The Scope of Disability in Women, Sexuality, and Psychosocial*

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*Issues.* Part 2 includes *The GYN Examination and GYN Health Screening.*

This program was recorded by Raymond L Cox, Jr., MD, MBA, FACOG and Caroline Signore, MD, MPH, FACOG. Elisabeth Quint, MD, FACOG served as faculty chair. <http://streaming.acog.org/WomenWithDisabilities/>.

### **AHRQ Agency for Healthcare Research and Quality “Real Men Wear Gowns”**

The Agency for Healthcare Research and Quality (AHRQ) has joined with the Advertising Council to launch a national public service campaign designed to raise awareness among middle-aged men about the importance of preventive medical testing. The new campaign, "Real Men Wear Gowns," tells men over 40 to learn which preventive screening tests they need to get and when they need to get them. According to AHRQ's Medical Expenditure Panel Survey, men are 25 percent less likely than women to have visited the doctor within the past year and are 38 percent more likely than women to have neglected their cholesterol tests. Data from the Centers for Disease Control and Prevention indicate that men are 1.5 times more likely than women to die from heart disease, cancer, and chronic lower respiratory diseases.

The campaign encourages men to visit a comprehensive website, [www.ahrq.gov/realmen/](http://www.ahrq.gov/realmen/). The site provides the recommended ages for preventive testing (as well as a list of tests), a quiz designed to test knowledge of preventive health care, tips for talking with the doctor, a glossary of consumer health terms, and links to online resources where men can find more medical information.

### **Behavioral Health Insights Peter Stuart, IHS Psychiatry Consultant Chronic Pain Management 101: Saying No to Patients**

Ms. Howard has been followed in your clinic for several years for a variety of complaints including chronic neck and arm pain. She has a history of rotator cuff surgery that did not substantially improve her pain status. Her rehab participation could be characterized by the words “erratic to none.” She also has a history of periodic drinking episodes, depression and several overdoses while intoxicated, and previous tolerance development to narcotics and drug-seeking behavior. She is involved in a chaotic relationship. You do believe she has some physiologic basis for her pain but her compliance with your recommendations is erratic at best and you have on several occasions assisted her in detoxing from narcotics only to have her go to another provider and be restarted on them. She can be quite dramatic when claiming to suffer from pain and has accused you previously of “not doing enough to help me with my pain.” She is also on an antidepressant and gabapentin and cannot tolerate NSAIDs due to GI complications. You have a pain contract in place.

She presents today telling you she needs a refill of her Percocet one week before they were supposed to run out. She

has been taking “1 or 2 extra a day because I was cleaning house last week and twisted my shoulder again.” She has a fairly recent history of prior “lost meds” that she has been counseled on in line with the pain treatment contract she signed. She appears mildly anxious and exhibits some discomfort with the shoulder even when non-obtrusively observed. The daily quantity is sufficient enough that you are concerned about withdrawal symptoms. At this point most providers start grinding their teeth. How do you approach her? Refer her to the psychiatrist or chronic pain committee (if you're fortunate enough to have either)? What about her current needs?

In the murky world of real human beings, this amalgam of physical, social, and emotional issues is not uncommon. The patient is likely to genuinely need some type of pain management, but is clearly out of control of her life and her self-care. She has demonstrated worrisome tolerance development, and there certainly is an addiction component active. She is clearly stepping outside of the boundaries set by the treatment contract. What is a reasonable goal here?

Do we, as providers, have a commitment to provide compassionate and effective care no matter what the circumstances? If so, what exactly does that look like in this case? Is the appropriate overall approach “harm reduction” or “abstinence-based,” or something else?

For me in situations like this, it is helpful to go back to some basic clinical principles. First, the overall clinical situation always trumps any absolute clinical rules about specific issues (i.e., if the pain contract says “no more meds after you lose a prescription”). Borrowing a little from rabbinic tradition, each patient presents a unique set of predispositions, current symptoms, and possible outcomes that require the provider to exercise discernment and judgment in determining what the appropriate course of action is.

For this patient, that means understanding that my goal is long-term pain relief and life management; the path I'm looking for keeps the patient in my practice, but also provides enough incentive for her to make some necessary changes for her benefit. Second, sometimes the right answer is “no.” As physicians, the principles of beneficence and minimal malfeasance are in play here. She is presenting in a situation where contingency management can be helpful in shifting behavior. In this case it might be worth using the positive contingency of getting her pain meds to decrease her discomfort both from withdrawal symptoms and pain in order to get her attending rehab and counseling. The challenge here is often a systems one – lack of access to these services at the time of presentation. If the system is broken and doesn't work well, it is incredibly important to acknowledge that reality.

An appointment in rehab is available in three days time. In order to involve her in the process you negotiate with her to walk to rehab, schedule the appointment in person, and return to your office, at which time you will provide her with a prescription for the three days. Further refills will be

contingent on showing up at rehab, and will be filled after she has her rehab appointment. Here is where saying “no refill until . . .” can be very important.

Alternatively, you believe the big issue here is that she is not managing her meds appropriately (she is not following the contract, you have given her prior “chances” to learn the system, the system has done its part by providing her with the full prescription when she comes in, and is available to her if she has been debating about increasing her dose at home). In this case, the challenge becomes saying “no” without breaking the treatment relationship.

Third, “no” can be said in a supportive way. The principles for saying “no” in a supportive way are as follows: 1) start with empathizing and putting yourself in the patient’s shoes, for example “I hear from what you’re saying and can see by looking at you that you are very uncomfortable right now, and I’m guessing you’re also worried about what withdrawal is going to be like if you don’t get something. Is that close to what’s going on?” 2) align yourself alongside the patient and look at the problem together and the potential consequences of different approaches together; for example “Help me look at the options from your perspective. First option – I just refill the meds, no further questions asked, what happens then? And after that? And what’s happened before when we’ve done that?

And how was that experience? Second option – I tell you no more meds . . . (repeat). Third option – can you think of a third option?” 3) summarize the options preferably using similar language to the patient; 4) tell the patient what you personally are comfortable doing and why, and 5) acknowledge that the patient may be angry, frustrated, annoyed, scared, etc. and that you appreciate and understand that response and will continue working with her on her care.

Part 4 is the most difficult part because it is where you may be choosing an option different than the one the patient prefers. It is very important to be prepared for strong reactions. In Ms. Howard’s case she initially tells you to “I’ll just go somewhere else then.” You reply, “Yes, I think I’d be upset and scared too, and at the same time I hope you will continue to work with me.” If the strong feelings can be safely tolerated and tested with the patient, you have just successfully improved the relationship bond with the patient and the ability of the patient to tolerate further conflict with you – for the best interest of the patient.

In summary, the key ingredients here are an ability to see the big picture with the patient, to align yourself alongside the patient rather than against, and to support movement towards health sometimes by setting firm limits and boundaries but always in a context of compassion and caring. What else does this approach require? Time and focused attention . . . and if you can’t hold the system accountable for providing these basic human needs, you’re not going to get far in holding the patient accountable.

## **Breastfeeding Suzan Murphy, PIMC**

### **A new look at what works to support breastfeeding in hospitals**

On June 13, 2008, the Centers for Disease Control and Prevention (CDC) published in its weekly *Morbidity and Mortality Weekly Report (MMWR)*, “Breastfeeding-Related Maternity Practices at Hospitals and Birth Centers – United States, 2007.” The article is the result of the first national Maternity Practices in Infant Nutrition and Care (mPINC – called “m-pink”) survey. The survey used questions from seven categories of practice that are known to support breastfeeding, such as those found in the Ten Steps for Baby Friendly Hospitals. The categories and typical questions were:

1. Labor and delivery – Do mothers and newborns routinely experience skin-to-skin contact and early breastfeeding initiation?
2. Breastfeeding assistance – Is assessment, recording, and instruction provided to new families on infant feeding? For example, are pacifiers not provided to breastfeeding infants?
3. Mother-newborn contact – Is the separation of mother and newborn avoided?
4. Newborn feeding practices – What and how are breastfed babies fed while in the hospital or birthing center? For example, is supplementation common and why?
5. Breastfeeding support after discharge – Are resources provided for the new family when they are discharged? Where can they go for assistance if problems or concerns arise?
6. Nurse/birth attendant breastfeeding training and education – What kind of breastfeeding support training and on-going education does staff receive?
7. Structural and organizational factors related to breastfeeding –
  - a. Does the facility have a breastfeeding policy and how is it communicated to staff?
  - b. Is there support for breastfeeding employees?
  - c. Does the facility receive free infant formula?
  - d. Is prenatal breastfeeding education available?
  - e. Is there coordination of lactation care?

The survey was mailed to 3,143 hospitals and 138 birth centers; of these, 2,690 hospitals and 121 birthing centers responded. The survey was structured to be completed by the person most knowledgeable of the facility’s intra-partum practices related to breastfeeding. To encourage true answers to survey questions, the responders and their administration were assured that their location and name would be kept confidential. The only potential identifier was the name of the state where the facility was located. The data were summarized by state and region.

The results of the survey were based on a maximum score

of 100. For each category from above, the mean subscale scores from highest to lowest were:

- |    |   |
|----|---|
| 80 | 2. Breastfeeding assistance                                       |
| 77 | 4. Newborn feeding practices                                      |
| 70 | 3. Mother-newborn contact   |
| 66 | 7. Structural and organizational factors related to breastfeeding |
| 60 | 1. Labor and delivery   |
| 51 | 6. Nurse/birth attendant breastfeeding training and education     |
| 40 | 5. Breastfeeding support after discharge                          |

State survey results strongly correlated with their breastfeeding prevalence rates. This suggests that where there are more evidenced-based breastfeeding support maternity practices in place, there are positive impacts on breastfeeding. Unfortunately, the reverse is also true.

For more information the survey project and survey questions, please see [www.cdc.gov/mmwr](http://www.cdc.gov/mmwr). June 13, 2008/vol 57/No. 23, and [www.cdc.gov/mpinc](http://www.cdc.gov/mpinc).

CDC, Breastfeeding-Related Maternity Practices at Hospitals and Birth Centers --- United States, 2007 MMWR Weekly. June 13, 2008 / 57(23);621-625. <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5723a1.htm>.

## Family Planning

### Injectable contraception: what should the longest interval be for reinjections?

**Background:** Progestin-only injectable contraceptives continue to gain in popularity, but uncertainty remains about pregnancy risk among women late for reinjection. The World Health Organization (WHO) recommends a "grace period" of two weeks after the scheduled 13-week reinjection. Beyond two weeks, however, many providers send late clients home to await menses.

**Study Design:** A prospective cohort study in Uganda, Zimbabwe and Thailand followed users of depot-medroxyprogesterone acetate (DMPA) for up to 24 months. Users were tested for pregnancy at every reinjection, allowing analysis of pregnancy risk among late comers. **Results:** The analysis consists of 2290 participants contributing 13,608 DMPA intervals. The pregnancy risks per 100 women-years for "on time" [0.6; 95% confidence interval (CI), 0.33-0.92], "2-week grace" (0.0; 95% CI, 0.0-1.88) and "4-week grace" (0.4; 95% CI, 0.01-2.29) injections were low and virtually identical.

**Conclusion:** Extending the current WHO grace period for DMPA reinjection from 2 to 4 weeks does not increase pregnancy risk and could increase contraceptive continuation.

Steiner MJ, Kwok C, Stanback J, et al. Injectable contraception: what should the longest interval be for reinjections? *Contraception*. 2008 Jun;77(6):410-4. Epub 2008 Apr 10. <http://www.ncbi.nlm.nih.gov/pubmed/18477489>.

### Depo Now: preventing unintended pregnancies among adolescents and young adults

**Results:** Those randomized to a bridge method were 1.8 (1.1, 2.9) times more likely than Depo Now subjects to return for their 21-day repeat pregnancy test, but only 55% (n = 125) of these young women actually received their first DMPA injection. Continuation rates at the third injection were 29.7% (n = 30) for those in the Depo Now group and 21.1% (n = 49) for those assigned to the bridge method (p = .09). Three factors were significantly associated with adherence to the third injection: randomized to Depo Now group, knowing more women who use DMPA, and returning to clinic for the 21-day repeat pregnancy test visit. Finally, 28 pregnancies were diagnosed during the study period, and those in the bridge method group were almost 4.0 (1.2, 13.4) times more likely to be diagnosed with a pregnancy than those in the Depo Now group.

**Conclusions:** Immediate administration of DMPA is associated with improved adherence to DMPA continuation and fewer pregnancies.

Rickert VI, Tiezzi L, Lipshutz J, et al. Depo Now: preventing unintended pregnancies among adolescents and young adults. *J Adolesc Health*. 2007 Jan;40(1):22-8. <http://www.ncbi.nlm.nih.gov/pubmed/17185202>.

## CCC Editorial Comment

The first article provides reassurance that a woman who is late, even as late as four weeks, for her scheduled Depo-Provera injection faces a low risk of unintended pregnancy and should receive the next injection without additional barriers. The second article provides more support for a "quick start" approach to Depo-Provera initiation. A "quick start" protocol can also be used for resuming Depo Provera use for those who are more than 2 to 4 weeks past the recommended date for their next dose.

## Frequently asked questions

### Progesterone for the Prevention of Recurrent Spontaneous Preterm Birth

**Q.** My patient is asymptomatic with a documented history of one prior spontaneous preterm birth at 33 weeks who is now 18 weeks gestation by a good LMP and an ultrasound at 12 weeks. Should she be give progesterone therapy?

**A.** Yes, but first make sure she agrees to return weekly until 36 weeks of pregnancy.

The incidence of preterm birth has risen progressively over the last decade from 9% to 12% of all births in the US. Preterm birth is the second leading cause of infant mortality in this country and a significant proportion of survivors have residual disabilities. Despite multiple trials of tocolytics, antibiotics, and other preventive strategies, no effective method of preventing preterm birth has been found.

Recently, prophylactic treatment of high risk women with a history of one or more prior spontaneous preterm births with

progestational compounds have demonstrated efficacy.<sup>1,2</sup> A prior meta-analysis<sup>3</sup> has also demonstrated a significant reduction in the rate of preterm delivery with the use of 17 alpha hydroxyprogesterone caproate (17P). The American College of Obstetrics and Gynecology (ACOG) has recommended that when progesterone is used, it be restricted to women with a documented history of a previous spontaneous birth at less than 37 weeks of gestation.<sup>4</sup> Extensive experience with progesterone has shown it not to be a teratogen,<sup>5</sup> and its use in this protocol will not involve administering it during organogenesis in the first trimester.

As a referral center, ANMC renders care to a large number of women who have experienced preterm birth, and an effective preventive treatment would be most advantageous to this population. Referral of these women and/or their infants to Level III centers for delivery and prolonged level III newborn intensive care generates significant expenditures for the institution that could be avoided by prevention of the problem.

#### Eligible Patients:

- 1) Asymptomatic women with a documented history of one or more prior spontaneous preterm births (less than 35 weeks gestation) who are identified prior to 20 weeks gestation, who are dated by ultrasound prior to 20 weeks, and who agree to return for weekly injections from 16 weeks (may enroll up to 20 weeks) to 36 weeks of pregnancy.
- 2) Consult with Maternal Fetal Medicine to establish eligibility and monitor outcomes.

#### Ineligible Patients:

- 1) Women with a history of prior preterm birth due to a known cause such as a uterine malformation or cervical insufficiency requiring cervical cerclage.
- 2) Women who present with symptoms of preterm labor (symptomatic uterine contractions, short cervix on ultrasound, uterine bleeding, ruptured membranes) after 20 weeks gestation.
- 3) Women with a multi-fetal gestation.
- 4) Women with a known fetal anomaly.
- 5) Women with a prior indicated preterm birth (as a result of severe preeclampsia, placenta previa, fetal demise, or threatening maternal medical illness).

#### Drug Treatment Protocol:

- 1) Weekly intramuscular injection of 17-hydroxyprogesterone caproate (17P) 250 mg\* from 16 through 36 weeks of gestation (available through many pharmacies as 10mL vials (250mg/mL) at a cost of approximately \$120/vial (if >6 vials are ordered); be sure to check out availability before you discuss the possible therapy with your patient).
- 2) Fetal growth ultrasounds every 4 weeks while the patient is being treated.

#### Outcomes for Quality Assurance:

- 1) Incidence of preterm birth prior to 35 weeks.
- 2) Infant weights and Apgar scores.
- 3) Incidence of preterm labor requiring inpatient treatment but not resulting in preterm birth.
- 4) Any adverse maternal effects while receiving the therapy.

#### CCC Editorial Comment:

##### Short cervix, multiple gestation, preterm labor

There is as yet no consistent evidence that this drug is effective in women with preterm labor, a short cervix, or other high risk conditions.<sup>6</sup> On the other hand, progesterone supplementation did *not* reduce the rate of preterm birth in multiple gestations randomly assigned to receive this therapy.<sup>7</sup>

#### References

1. Meis PJ, et al. Prevention of recurrent preterm delivery by 17 alpha hydroxyprogesterone caproate. *N Engl J Med.* 2003; 348:2379-85. <http://www.ncbi.nlm.nih.gov/pubmed/12802023>.
2. Da Fonseca EB, et al. Prophylactic administration of progesterone by vaginal suppository to reduce the incidence of spontaneous preterm birth in women at increased risk: A randomized placebo-controlled double-blind study. *Am J Obstet Gynecol.* 2003; 188:419-24.
3. Keirse MJ. Progestogen administration in pregnancy may prevent preterm delivery. *Brit J Obstet Gynaecol.* 1990; 97:149-57.
4. ACOG Committee Opinion No.291. Use of progesterone to prevent preterm birth. *Obstet Gynecol.* 2003; 102:1115-6.
5. Briggs GG, Freeman RK, Yaffe SJ. *Drugs in Pregnancy and Lactation.* 6<sup>th</sup> edition, 2002, page 674. Lippincott Williams and Wilkins. Philadelphia.
6. Meis PJ. 17 hydroxyprogesterone for the prevention of preterm delivery. *Obstet Gynecol.* 2005 May;105(5):1128-35.
7. Rouse DJ et al. A trial of 17 alpha-hydroxyprogesterone caproate to prevent prematurity in twins. *N Engl J Med.* 2007 Aug 2;357(5):454-61. <http://www.ncbi.nlm.nih.gov/pubmed/17671253>.

#### International Health Update

##### Claire Wendland; Madison, WI

##### New evidence on lead's long-term effects

Lead has been back in the news lately. A potent neurotoxin, lead damages the brain by altering neurotransmitter release in a way that leads to accelerated apoptosis (cell death). It is a known toxin for adults, but appears to be a particularly bad actor in the developing brain. Though it hasn't typically been a problem in the rural parts of Indian country, urban AI/AN people living in dilapidated housing stock are at risk for chronic lead toxicity. Two new

articles based on longitudinal research from the Cincinnati Lead Study (CLS) may heighten the stakes of the debate over acceptable childhood lead levels.

The CLS birth cohort was recruited in the womb between 1979 and 1984 from urban inner-city neighborhoods known to have high lead levels. These children got detailed exposure histories from the prenatal period on, frequent neuropsychiatric exams and serum lead levels, and have now been followed into young adulthood. One of the two new reports shows a small but significant correlation between childhood lead levels and adult arrest records in this cohort. After careful adjusting for potential confounders, John Wright and colleagues found that for every 5 mcg/dl increase in prenatal (maternal) and childhood blood lead, total arrests and arrests for violent crime went up by roughly forty percent. In the second report, Kim Cecil and colleagues used MRI to assess brain volume in 157 members of the CLS cohort. Regression analysis demonstrated a linear dose-dependent correlation between childhood serum lead levels and reduction in adult brain volume, a result that was highly statistically significant. Most interesting, the reduction was specific to grey matter in the anterior cingulate cortex and portions of the prefrontal cortex. (White matter and CSF volume were not affected.) These are the regions responsible for judgment, focusing attention, regulation of mood, and executive functions. Grey-matter volume loss in these areas was also much more pronounced among men than women, even at similar lead levels. This finding suggests a mechanism for the links previously explored between childhood lead exposure and adult anti-social behavior, criminal activity, and poor intellectual performance.

Some of you may be scratching your heads over why this is an international health problem. Unfortunately, the measures put in place to mitigate lead toxicity in the United States years ago – screening programs, mandated transitions to unleaded gasoline, abolition of lead-based paints and ceramic glazes – never happened in much of the Third World. In fact, some gasoline sold today in South America, the Middle East and Africa has *more* lead additives than leaded gas in our country ever did; paint sold for residences, toys, and playground equipment still contains high levels of lead in Africa and several countries in Asia. In Central and South America, unregulated industrial processes are the major culprits. Some experts argue that an unrecognized epidemic of low- to moderate-level lead poisoning is occurring in much of the Third World, and a few small pilot studies of lead levels tend to confirm this assessment. Improvements in screening, policy and enforcement are urgent.

Cecil KM et al. Decreased brain volume in adults with childhood lead exposure. *PLoS Medicine*. 5(5):e112, 2008 <http://www.ncbi.nlm.nih.gov/pubmed/18507499>.

Wright JP et al. Association of prenatal and childhood blood lead concentrations with criminal arrests in early adulthood. *PLoS Medicine*. 5(5):e101, 2008 <http://www.ncbi.nlm.nih.gov/pubmed/18507497>.

## Nurse's Corner What Is Forensic Nursing?

Forensic Nursing is the application of nursing science to public or legal proceedings; the application of the forensic aspects of health care combined with the bio-psycho-social education of the registered nurse in the scientific investigation and treatment of trauma and/or death of victims and perpetrators of abuse, violence, criminal activity, and traumatic accidents. The forensic nurse provides direct services to individual clients, consultation services to nursing, medical, and law related agencies, and expert court testimony in areas dealing with trauma and/or questioned death investigative processes, adequacy of services delivery, and specialized diagnoses of specific conditions as related to nursing.

The above is excerpted from the International Association of Forensic Nurses website.

For more information about how to become a Sexual Assault Nurse Examiner (SANE) visit the IAFN web site at <http://www.iafn.org/index.cfm>. Need technical assistance? Visit the Sexual Assault Forensic Examiner Technical Assistance website at <http://www.safeta.org/>.



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## MEETINGS OF INTEREST

### Available EHR Courses

EHR is the Indian Health Service's Electronic Health Record software that is based on the Resource and Patient Management System (RPMS) clinical information system. For more information about any of these courses described below, please visit the EHR website at [http://www.ihs.gov/CIO/EHR/index.cfm?module=rpms\\_ehr\\_training](http://www.ihs.gov/CIO/EHR/index.cfm?module=rpms_ehr_training). To see registration information for any of these courses, go to <http://www.ihs.gov/Cio/RPMS/index.cfm?module=Training&option=index>.

### Pathways into Health Third Annual Conference September 9 - 10, 2008; Girdwood Alaska

Achieving Excellence, Harmony, and Balance: Transforming health professions education in American Indian and Alaska Native communities. Pathways Into Health is a grassroots collaboration of more than 200 individuals and organizations dedicated to improving the health, health care, and health care education of American Indians and Alaska Natives (AI/AN). We are combining the expertise, resources, and strength of tribes and AI/AN organizations, tribal colleges, prominent universities, the Indian Health Service and AI/AN communities as we work together to solve a major problem that exists today—the shortage of AI/AN health care professionals.

The purpose of this conference is to bring together a diverse group of individuals to contribute to the development of appropriate and effective educational methodologies for primarily distance-based AI/AN health professions education. Three core concepts that will be illuminated to advance this process are:

1. Cultural attunement
2. Interprofessional education
3. Distance learning/telehealth technologies

The conference location will be the Alyeska Resort in Girdwood, Alaska; go to [www.alyeskaresort.com](http://www.alyeskaresort.com). The sponsor website is [www.pathwaysintohealth.org](http://www.pathwaysintohealth.org). For more information about registration, call for abstracts, call for photos, or sponsorship, please visit [www.pathwaysintohealth.org/conference08/](http://www.pathwaysintohealth.org/conference08/). If you have questions, contact Lesley Craig at [lesley.craig@hhs.gov](mailto:lesley.craig@hhs.gov).

### ACOG/IHS “Denver” Course (Now in Salt Lake City, Utah)

#### Obstetric, Neonatal and Gynecologic Care September 14 - 18, 2008; Salt Lake City, Utah

This annual women's health update for nurses, advanced practice clinicians, and physicians provides a four-day schedule of lectures, workshops, hands-on sessions, and team building. The large interdisciplinary faculty collaborates to teach clinical and practical topics as they apply in Indian health

settings. Many faculty members are your colleagues in IHS and tribal facilities; private sector faculty also bring a wide range of experience providing Indian health care.

Learn the latest evidence-based approaches to maternal and child health services, and share problems and solutions with your colleagues from across Indian country. The course can also serve as a good foundation for professionals who are new to women's health care or new to the Indian health system.

In addition to the basic course, you may sign up for the Neonatal Resuscitation Program, and come away with your certificate from this convenient pre-course program. The opportunity to fulfill continuing education requirements in a concentrated format is significant: with the optional NRP, we can document your participation in nine half-days of education.

Sign up early! You'll have first chance for support from your facility and coverage for your time in Salt Lake City. Getting these benefits lined up takes time, so don't delay and miss out! In addition, early registration holds your place, and puts you in line for possible availability of scholarship funds.

Watch your mail for the course brochure and registration form. For more information, contact Yvonne Malloy at [ymalloy@acog.org](mailto:ymalloy@acog.org).

### Childhood Obesity/Diabetes Prevention in Indian Country: Making Physical Activity Count! December 2 - 4, 2008; San Diego, California

The target audience for this national conference includes health care providers, diabetes educators, school nurses, nutritionists, coaches, physical education teachers, fitness program directors, and other individuals involved in community or school based physical activity for Indian children and youth. Faculty for the conference includes a cross section of experts who will address successful physical activity interventions, technology in measuring physical activity outcomes, and selected programs that are successfully addressing childhood obesity and diabetes in Indian country. CME/CEUs will be available. Those interested in proposing a presentation or a poster on their success in addressing physical activity with American Indian children and youth are especially encouraged to apply.

The conference will be held at the Town and Country Resort and Convention Center. Sponsors of this conference include the Indian Health Service, Bureau of Indian Education (BIA), Active Living Research Center at San Diego State University, LIFESCAN, and the University of Arizona. To learn more about the conference, to register for the conference and/or to propose a paper or poster, visit <http://nartc.fcm.arizona.edu/conference>. Alternatively you can also call Ms. Pandora Hughes at the Native American Research and Training Center at (520) 621-5075 for additional information.



#### Who Should Attend?

Anyone interested in the use of IT to improve the health status of American Indian/Alaska Native people.

#### Hotel Information:

Hyatt Regency Phoenix  
122 North 2nd Street  
Phoenix, AZ 85004  
(602) 252-1234  
<http://www.phoenix.hyatt.com/>

A limited number of government rate rooms at \$102 are available on a first-come basis until **November 21, 2008**. Ask for the *"IHIM Conference"*:

# Save the Dates!

## Indian Health Information Management Conference: 2008

*"Managing Health  
Information Technology to Improve  
Performance and Outcomes"*

December 15—19, 2008

Phoenix, Arizona

For additional information, please visit the conference website at  
<http://www.ihs.gov/CIO/IHIMC/>



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## POSITION VACANCIES

*Editor's note: As a service to our readers, THE IHS PROVIDER will publish notices of clinical positions available. Indian health program employers should send brief announcements on an organizational letterhead to: Editor, THE IHS PROVIDER, The IHS Clinical Support Center, Two Renaissance Square, Suite 780, 40 North Central Avenue, Phoenix, Arizona 85004. Submissions will be run for two months, but may be renewed as many times as necessary. Tribal organizations that have taken their tribal "shares" of the CSC budget will need to reimburse CSC for the expense of this service. The Indian Health Service assumes no responsibility for the accuracy of the information in such announcements.*

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### **Primary Care Physician and Medical Director Nooksack Community Health Center; Everson, Washington**

The Nooksack Community Clinic in Everson, Washington is seeking an experienced primary care physician to assume the duties of Medical Director. The clinic provides outpatient care to approximately 2000 members of the Nooksack Indian Tribe and their families. The position includes both administrative/supervisory duties as well as part-time direct patient care. This is a full time position with a competitive salary and benefits. There are no on call, inpatient duties, or obstetrics. We currently are staffed with one family practitioner, one internist, one pediatrician, and one nurse practitioner. Additionally we have three mental health counselors, a state-of-the-art four chair dental clinic, a nutritionist, a diabetic nurse educator, and an exercise counselor. We provide high quality care in an environment that prides itself on treating our patients like family.

The clinic is located in a very desirable semi-rural area of northwest Washington, renown for its scenic beauty, quality of life, and year round outdoor recreation. The beautiful city of Bellingham is 20 minutes away. Vancouver, Canada is less than 90 minutes, and Seattle is approximately a two-hour drive away. St. Joseph Hospital in nearby Bellingham offers a wide range of specialist and inpatient services, an excellent hospitalist program, as well as emergency care, lab, and imaging services, all easily accessible for our patients.

For further information please contact/send CV to Carolyn Ferrer, c/o Nooksack Community Health Center, PO Box 647, Everson, Washington 98247; telephone (360) 966-2106; fax (360) 966-2304; or e-mail [ferrercarolyn@aol.com](mailto:ferrercarolyn@aol.com).

### **Nurse Specialist - Diabetes Whiteriver Service Unit; Whiteriver, Arizona**

The Nurse Specialist (Diabetes) is to establish, develop,

coordinate, monitor, and evaluate the clinical diabetic education program. The incumbent is responsible for establishing, providing, facilitating, promoting, and evaluating a comprehensive education program for patients with diabetes, as well as prevention of and education about diabetes. Candidate must provide proof that they have Certified Diabetes Educator (CDE) certification and certification from the National Certification Board for Diabetes Educators.

The Whiteriver Service Unit is located on the White Mountain Apache Indian Reservation. The hospital is a multidisciplinary facility that includes emergency room, urgent care, inpatient, outpatient, dental, social services, physical therapy, optometry, obstetrics, podiatry, dietary, ambulatory surgery, and public health nursing. We are just a short distance from Sunrise Ski Resort which offers great snow skiing. We are surrounded by tall ponderosa pine trees and beautiful mountains where you can experience the four seasons, and great outdoor activities such as mountain biking, hiking, hunting, fishing, camping, and boating. We are just three hours northeast of the Phoenix metropolitan area.

For additional information, please contact CAPT Steve Williams, Director of Diabetes Self-Management, by e-mail at [stevenj.williams@ihs.gov](mailto:stevenj.williams@ihs.gov); telephone (928) 338-3707.

Other RN vacancy positions include Family Care Unit, Birthing Center, Outpatient, Emergency Room, and Ambulatory Surgery. Please contact Human Resources at (928) 338-3545 for more information.

### **Physicians Emergency Medicine PA-Cs Family Practice PA-Cs/ Family Nurse Practitioners Rosebud Comprehensive Health Care Facility; Rosebud, South Dakota**

The Rosebud Comprehensive Health Care Facility in Rosebud, South Dakota is seeking board eligible/board certified family practice physicians, pediatricians, emergency medicine physicians, an internist, and an ob/gyn with at least five years post-residency experience. We are also in need of ER PA-Cs, family practice PA-Cs, and family nurse practitioners. Rosebud is located in rural south central South Dakota west of the Missouri River on the Rosebud Indian Reservation and is approximately 30 miles from the Nebraska boarder. We are a 35 bed facility that has a 24 hour emergency department, and a busy clinic that offers the following services: family practice, internal medicine, ob/gyn, pediatrics, general surgery, oral surgery, optometry, dentistry, physical therapy, dietary counseling, and behavioral health. Our staff is devoted to providing quality patient care and we have several medical staff members that have been employed here ten or more years.

The beautiful Black Hills, Badlands, Custer State Park, Mount Rushmore, and Crazy Horse Memorial are just 2- 3 hours

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away. South Dakota is an outdoorsman's paradise with plenty of sites for skiing, hiking, hunting, fishing, boating, and horseback riding. Steeped in western folklore, Lakota culture, history, and land of such famous movies as "Dances with Wolves" and "Into the West" there is plenty for the history buff to explore. If you are interested in applying for a position, please contact Dr. Valerie Parker, Clinical Director, at (605) 660-1801 or e-mail her at [valerie.parker@ihs.gov](mailto:valerie.parker@ihs.gov).

**Physician/Medical Director  
Physician Assistant or Family Nurse Practitioner  
Dentist  
Dental Hygienist  
SVT Health Center; Homer, Alaska**

SVT Health Center has immediate openings for a medical director (MD, DO; OB preferred), family nurse practitioner or physician assistant, dentist, and dental hygienist (21 - 28 hours per week). The ideal candidate for each position will be an outgoing, energetic team player who is compassionate and focused on patient care. The individual will be working in a modern, progressive health center and enjoy a wide variety of patients.

The Health Center is located in southcentral Alaska on scenic Kachemak Bay. There are many outdoor activities available including clam digging, hiking, world-class fishing, kayaking, camping, and boating. The community is an easy 4 hour drive south of Anchorage, at the tip of the Kenai Peninsula.

SVTHC offers competitive salary and a generous benefit package. Candidates may submit an application or resume to Beckie Noble, SVT Health Center, 880 East End Road,, Homer, Alaska 99603; telephone (907) 226-2228; fax (907) 226-2230.

**Family Practice Physician  
Physician Assistant/Nurse Practitioner  
Fort Hall IHS Clinic; Fort Hall, Idaho**

The Fort Hall IHS Clinic has openings for a family practice physician and a physician assistant or nurse practitioner. Our facility is an AAAHC-accredited multidisciplinary outpatient clinic with medical, dental, optometry, and mental health services, and an on-site lab and pharmacy. Our medical staff includes five family practice providers who enjoy regular work hours with no night or weekend call. We fully utilize the IHS Electronic Health Record and work in provider-nurse teams with panels of patients.

Fort Hall is located 150 miles north of Salt Lake City and 10 miles north of Pocatello, Idaho, a city of 75,000 that is home to Idaho State University. The clinic is very accessible, as it is only one mile from the Fort Hall exit off of I-15. Recreational activities abound nearby, and Yellowstone National Park, the Tetons, and several world class ski resorts are within 2½ hours driving distance.

Please contact our clinical director, Chris Nield, for more information at [christopher.nield@ihs.gov](mailto:christopher.nield@ihs.gov); telephone (208)238-5455).

**Dentist  
Staff Physician  
Mid-Level Provider  
Nimiipuu Health; Lapwai, Idaho**

Caring People Making a Difference. Nimiipuu Health is an agency of the Nez Perce Tribe, with ambulatory health care facilities in Lapwai and Kamiah located in beautiful Northern Idaho near the confluence of the Snake and Clearwater Rivers, an area rich in history, natural beauty, and amiable communities. We provide excellent benefits and opportunities for personal and professional growth. Nimiipuu Health's caring team is looking for individuals making a difference in the health care field and is now accepting applications for several positions.

Dentist: Requires DDS/DMD degree from an American Dental Association accredited dental school, with two years of experience, preferably in general practice. Must have state licensure in good standing, valid driver's license with insurable record, and pass a background check. Salary DOE; part-time or full-time in Lapwai. Open until filled.

Staff Physician: Requires one to three years experience in family medicine/ambulatory care/prenatal care. Must be board certified or board eligible. Must have Idaho MD or DO license or obtain license within one year of appointment. Must have DEA number or obtain within three months of appointment. Knowledge of history, culture, and health needs of Native American communities preferred. Salary DOE; part-time or full-time in Lapwai. Open until filled.

Mid-Level Provider: Idaho licensed FNP or PA. Incumbent can obtain Idaho license within one year of appointment. Must have BLS and obtain ACLS within six months of appointment. Must have valid driver's license with insurable record, and will be required to pass extensive background check. Salary DOE; full-time in Kamiah. Open until filled.

A complete application packet includes a NMPH job application, copy of current credentials, two references, resume or CV, a copy of your tribal identification or Certification of Indian Blood (CIB), if applicable, to Nimiipuu Health, PO Drawer 367, Lapwai, ID 83540. For more information call (208) 843-2271 or e-mail [carmb@nimiipuu.org](mailto:carmb@nimiipuu.org). For more information about our community and area please go to [www.nezperce.org](http://www.nezperce.org) or [www.zipskinny.com](http://www.zipskinny.com). Indian preference applies.

**Family Physician/Medical Director  
The Native American Community Health Center, Inc.;  
Phoenix, Arizona**

The Native American Community Health Center, Inc. (Native Health), centrally located in the heart of Phoenix,

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Arizona, is currently seeking a skilled and energetic family physician/medical director who would enjoy the opportunity of working with diverse cultures. The family physician/medical director is a key element in providing quality, culturally competent health care services to patients of varied backgrounds and ages within a unique client-focused setting that offers many ancillary services. Native Health offers excellent, competitive benefits and, as an added bonus, an amazing health-based experience within the beautiful culture of Native Americans. Arizona license Preferred. For more information, contact the HR Coordinator, Matilda Duran, by telephone at (602) 279-5262, ext. 3103; or e-mail [mduran@nachci.com](mailto:mduran@nachci.com). For more information, check our website at [www.nativehealthphoenix.org](http://www.nativehealthphoenix.org).

### **Family Medicine Physician Norton Sound Health Corporation; Nome, Alaska**

Practice full spectrum family medicine where others come for vacation: fishing, hunting, hiking, skiing, snowmobiling, dog mushing, and more.

The Gateway to Siberia. The Last Frontier. Nome, Alaska is 150 miles below the Arctic Circle on the coast of the Bering Sea and 120 miles from Russia. It was the home of the 1901 Gold Rush, and still is home to three operating gold dredges, and innumerable amateur miners. There are over 300 miles of roads that lead you through the surrounding country. A drive may take you past large herds of reindeer, moose, bear, fox, otter, and musk ox, or through miles of beautiful tundra and rolling mountains, pristine rivers, lakes, and boiling hot springs.

The Norton Sound Health Corporation is a 638 Alaskan Native run corporation. It provides the health care to the entire region. This encompasses an area about the size of Oregon, and includes 15 surrounding villages. We provide all aspects of family medicine, including deliveries, minor surgery, EGDs, colposcopies, colonoscopies, and exercise treadmills. Our closest referral center is in Anchorage. Our Medical Staff consists of seven board certified family practice physicians, one certified internist, one certified psychiatrist, and several PAs. This allows a very comfortable lifestyle with ample time off for family or personal activities.

Starting salary is very competitive, with ample vacation, paid holidays, two weeks and \$6,000 for CME activities, and a generous retirement program with full vesting in five years. In addition to the compensation, student loan repayment is available.

The practice of medicine in Nome, Alaska is not for everyone. But if you are looking for a place where you can still make a difference; a place where your kids can play in the tundra or walk down to the river to go fishing; a place where everyone knows everyone else, and enjoys it that way, a place where your work week could include a trip to an ancient Eskimo village, giving advice to health aids over the phone, or flying to Russia to medivacs a patient having a heart attack,

then maybe you'll know what we mean when we say, "There is no place like Nome."

If you are interested, please contact David Head, MD, by telephone at (907) 443-3311, or (907) 443-3407; PO Box 966, Nome, Alaska 99762; or e-mail at [head@nshcorp.org](mailto:head@nshcorp.org).

### **Family Practice Physician Central Valley Indian Health, Inc.; Clovis, California**

Central Valley Indian Health, Inc. is recruiting for a BC/BE, full-time physician for our Clovis, California clinic. The physician will be in a family practice setting and provide qualified medical care to the Native American population in the Central Valley. The physician must be willing to treat patients of all ages. The physician will be working with an energetic and experienced staff of nurses and medical assistants. Central Valley Indian Health, Inc. also provides an excellent benefits package that consists of a competitive annual salary; group health insurance/life insurance at no cost; 401k profit sharing and retirement; CME reimbursement and leave; 12 major holidays off; personal leave; loan repayment options; and regular hours Monday through Friday 8 am to 5pm (no on-call hours required). For more information or to send your CV, please contact Julie Ramsey, MPH, 20 N. Dewitt Ave., Clovis, California 93612. Telephone (559) 299-2578, ext. 117; fax (559) 299-0245; e-mail [jramsey@cvih.org](mailto:jramsey@cvih.org).

### **Family Practice Physician Tulalip Tribes Health Clinic; Tulalip, Washington**

The Tulalip Tribes Health Clinic in Tulalip, Washington, is seeking two family practice physicians to join our Family Practice Outpatient clinic. We are a six physician outpatient clinic which sits on the edge of Tulalip Bay, 12 miles east of Marysville, Washington. Tulalip is known as an ideal area, situated 30 miles north of Seattle, with all types of shopping facilities located on the reservation. Sound Family Medicine is committed to providing excellent, comprehensive, and compassionate medicine to our patients. The Tulalip Tribes offer an excellent compensation package, group health plan, and retirement benefits. For more information, visit us on the web at [employment.tulaliptribes-nsn.gov/tulalip-positions.asp](http://employment.tulaliptribes-nsn.gov/tulalip-positions.asp). Please e-mail letters of interest and resumes to [wpaisano@tulaliptribes-nsn.gov](mailto:wpaisano@tulaliptribes-nsn.gov).

### **Family Practice Physician Seattle Indian Health Board; Seattle, Washington**

Live, work, and play in beautiful Seattle, Washington. Our clinic is located just south of downtown Seattle, close to a wide variety of sport and cultural events. Enjoy views of the Olympic Mountains across Puget Sound. The Seattle Indian Health Board is recruiting for a full-time family practice physician to join our team. We are a multiservice community health center for urban Indians. Services include medical, dental, mental health, nutrition, inpatient and outpatient substance abuse treatment, onsite pharmacy and lab, and a

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wide variety of community education services. Enjoy all the amenities a large urban center has to offer physicians. Our practice consists of four physicians and two mid-level providers. The Seattle Indian Health Board is a clinical site for the Swedish Cherry Hill Family Practice Residency program. Physicians have the opportunity to precept residents in both clinical and didactic activities. The Seattle Indian Health Board is part of a call group at Swedish Cherry Hill (just 5 minutes from the clinic). After hour call is 1 in 10. Program development and leadership opportunities are available.

Seattle is a great family town with good schools and a wide variety of great neighborhoods to live in. Enjoy all the benefits the Puget Sound region has to offer: hiking, boating, biking, camping, skiing, the arts, dining, shopping, and much more! Come join our growing clinic in a fantastic location. The Seattle Indian Health Board offers competitive salaries and benefits. For more information please contact Human Resources at (206) 324-9360, ext. 1105 or 1123; contact Maile Robidoux by e-mail at [mailer@sihb.org](mailto:mailer@sihb.org); or visit our website at [www.sihb.org](http://www.sihb.org).

**Psychiatrist  
Psychiatric Nurse Practitioner  
Four Corners Regional Health Center; Red Mesa, Arizona**

The Four Corners Regional Health Center, located in Red Mesa, Arizona is currently recruiting a psychiatrist. The health center is a six-bed ambulatory care clinic providing ambulatory and inpatient services to Indian beneficiaries in the Red Mesa area. The psychiatrist will provide psychiatric services for mental health patients. The psychiatric nurse practitioner will provide psychiatric nursing services. The incumbents will be responsible for assuring that basic health care needs of psychiatric patients are monitored and will provide medication management and consultation-liaison services. Incumbents will serve as liaison between the mental health program and medical staff as needed. Incumbents will work with patients of all ages, and will provide diagnostic assessments, pharmacotherapy, psychotherapy, and psychoeducation. Relocation benefits are available.

For more information, please contact Michelle Eaglehawk, LISW/LCSW, Director of Behavioral Health Services at (928) 656-5150 or e-mail [Michelle.Eaglehawk@ihs.gov](mailto:Michelle.Eaglehawk@ihs.gov).

**Pediatrician  
Fort Defiance Indian Hospital; Fort Defiance, Arizona**

Fort Defiance Indian Hospital is recruiting for pediatricians to fill permanent positions for summer 2008 as well as *locum tenens* positions for the remainder of this year. The pediatric service at Fort Defiance has seven physician positions and serves a population of over 30,000 residents of the Navajo Nation, half of which are under 21 years old! Located at the historic community of Fort Defiance just 15 minutes from the capital of the Navajo Nation, the unparalleled

beauty of the Colorado Plateau is seen from every window in the hospital. With a new facility just opened in 2002, the working environment and living quarters for staff are the best in the Navajo Area.

The pediatric practice at Fort Defiance is a comprehensive program including ambulatory care and well child care, inpatient care, Level I nursery and high risk stabilization, and emergency room consultation services for pediatrics. As part of a medical staff of 80 active providers and 50 consulting providers, the call is for pediatrics only, as there is a full time ED staff. Pediatrics has the unique opportunity to participate in the health care of residents of the Adolescent Care Unit, the only adolescent inpatient mental health care facility in all of IHS, incorporating western medicine into traditional culture. Our department also participates in adolescent health care, care for special needs children, medical home programs, school based clinics, community wellness activities, and other public health programs in addition to clinical services.

Pediatricians are eligible for IHS loan repayment, and we are a NHSC eligible site for payback and loan repayment. Salaries are competitive with market rates, and there are opportunities for long term positions in the federal Civil Service system or Commissioned Corps of the USPHS. Housing is available as part of the duty assignment.

While located in a rural, "frontier" region, there is a lot that is "freeway close." The recreational and off duty activities in the local area are numerous, especially for those who like wide open spaces, clean air, and fantastic scenery. There are eight National Parks and Monuments within a half day's drive, and world class downhill and cross country skiing, river rafting, fly fishing, organized local hikes and outings from March through October, and great mountain biking. Albuquerque, with its unique culture, an international airport, and a university, is the nearest major city, but is an easy day trip or weekend destination. Most important, there are colleagues and a close knit, family oriented hospital community who enjoy these activities together.

For more information, contact Michael Bartholomew, MD, Chief of Pediatrics, at (928) 729-8720; e-mail [michael.bartholomew@ihs.gov](mailto:michael.bartholomew@ihs.gov).

**Internal Medicine, Family Practice, and ER Physicians  
Pharmacists  
Dentists  
Medical Technologists  
ER, OR, OB Nurses  
Crow Service Unit; Crow Agency, Montana**

The Crow Service Unit is seeking health practitioners to come work with their dedicated staff on the Crow Indian Reservation. The Crow Service Unit consists of a small 24-bed hospital located in Crow Agency and two satellite clinics, Lodge Grass Health Center, located approximately 20 miles south of Crow Agency, and Pryor Health Station, located about 70 miles northwest of Crow Agency.

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The hospital is a multidisciplinary facility that includes inpatient, outpatient, urgent care, emergency room, dental, behavioral health, substance abuse, public health nursing, physical therapy, pharmacy, dietary, obstetrics, surgery, and optometry services. Our medical staff includes nine family practice positions, two ER physician positions, one general surgeon, two obstetrician/gynecologists, one podiatrist, one internist/pediatrician, one pediatrician, one radiologist, one nurse midwife, and six mid-level provider positions (NP or PA). Family practice physicians and the internist share the hospitalist responsibilities, and each primary care physician shares the daytime ER call duties. The staff is complemented by contract *locum tenens* physicians for nighttime, weekend, and holiday coverage. OB call is shared between the obstetrician/gynecologists, the midwife and the FP physicians.

The two outlying clinics in Lodge Grass and Pryor are primarily staffed by midlevel providers.

The Crow Tribe is a close, proud people. They maintain their own buffalo herd and proudly display their cultural heritage during events such as the well-known Crow Fair. Other points of cultural interest in the “Tipi Capital of the World” are The Little Big Horn Battlefield National Monument, Chief Plenty Coup State Park, and the Little Big Horn College.

For those who enjoy the outdoors, Red Lodge Mountain Resort offers great skiing. The Big Horn Canyon National Recreation Area offers great fishing, camping, and boating fun. The area offers spectacular mountains and mountain activities, and world class hunting and fishing. Billings, Montana, a city of 100,000, is less than an hour away.

For additional information, please contact Audrey Jones, Physician Recruiter, at [Audrey.jones@ihs.gov](mailto:Audrey.jones@ihs.gov); telephone (406) 247-7126; or Dr. Michael Wilcox at [Michael.wilcox@ihs.gov](mailto:Michael.wilcox@ihs.gov); telephone (406) 638-3309.

### **Family Practice Physician Warm Springs Health and Wellness Center; Warm Springs, Oregon**

The Warm Springs Health and Wellness Center has an immediate opening for a board certified/eligible family physician. We have a clinic that we are very proud of. Our facility has been known for innovation and providing high quality care. We have positions for five family physicians, of which one position is open. Our remaining four doctors have a combined 79 years of experience in Warm Springs. This makes us one of the most stable physician staffs in IHS. Our clinic primarily serves the Confederate Tribes of Warm Springs in Central Oregon. We have a moderately busy outpatient practice with our doctors seeing about 16 - 18 patients per day under an open access appointment system. Currently we are a pilot site for the IHS Director's Initiative on Chronic Disease Management. We fully utilize the IHS Electronic Health Record, having been an alpha test site for the program when it was created. We provide hospital care, including obstetrics and

a small nursing home practice, at Mountain View Hospital, a community hospital in Madras, Oregon. Our call averages 1 in 5 when fully staffed. For more information, please call our Clinical Director, Miles Rudd, MD, at (541) 553-1196, ext 4626.

### **Primary Care Physicians (Family Medicine/Internal Medicine)**

#### **Santa Fe Indian Hospital; Santa Fe, New Mexico**

The Santa Fe Indian Hospital is expanding its primary care department and is currently seeking three to four board certified family physicians and general internists to join its outstanding medical staff. We provide care to a diverse population of nine Pueblo communities in north central New Mexico, as well as an urban population in and around Santa Fe, New Mexico. The current primary care staff of five family physicians, three pediatricians, one internist, and three PA/CNP providers work closely with one another to give full spectrum ambulatory and inpatient services. Three nurse midwives, one OB-Gyn, one general surgeon, one podiatrist, one psychiatrist, and one psychologist are also on site.

Family physicians and general internists at the Santa Fe Indian Hospital all have continuity clinics, and are collectively responsible for covering a moderately busy urgent care and same day clinic seven days a week. They also participate in a rotating hospitalist schedule. When fully staffed, these providers will take one in eight night call and will work approximately two federal holidays per year. In our “work hard, play hard” approach to scheduling, hospitalist weeks are followed by scheduled long weekends off, with scheduled days off during the week in compensation for other weekend shifts.

This is an opportunity for experienced primary care physicians to have the best of two worlds: providing care to a fantastic community of patients *and* living in one of the country's most spectacular settings. Santa Fe has long been recognized as a world-class destination for the arts and southwestern culture, with nearly unlimited outdoor activities in the immediate area. As a consequence, our staff tends to be very stable, with very little turnover. Ideal candidates are those with previous experience in IHS or tribal programs who are looking for a long-term commitment. For more information, please contact Dr. Bret Smoker, Clinical Director, at (505) 946-9279 (e-mail at [bret.smoker@ihs.gov](mailto:bret.smoker@ihs.gov)), or Dr. Lucy Boulanger, Chief of Staff, at (505) 946-9273 (e-mail at [lucy.boulanger@ihs.gov](mailto:lucy.boulanger@ihs.gov)).

### **Chief Pharmacist Staff Pharmacist Zuni Comprehensive Healthcare Center; Zuni, New Mexico**

The ZCHCC, within the Indian Health Service, is located on the Zuni Indian Reservation in beautiful western New Mexico. ZCHCC is a critical access hospital with an inpatient unit consisting of 30 plus beds, labor and delivery suites,

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emergency department, and a large outpatient clinic. The center serves the Zuni and Navajo Tribes. Housing and moving expenses available for eligible applicants. The Zuni are a Pueblo people with rich culture, customs, and traditions. Applicants may contact Cordy Tsadiasi at (505) 782-7516 or CDR David Bates at (505) 782-7517.

### **Psychiatrist**

#### **SouthEast Alaska Regional Health Consortium; Sitka, Alaska**

Cross cultural psychiatry in beautiful southeastern Alaska. Positions available in Sitka for BE/BC psychiatrist in our innovative Native Alaskan Tribal Health Consortium with a state-of-the-art EHR in the coming year. Join a team of committed professionals. Inpatient, general outpatient, telepsychiatric, C/L, and child/adolescent work available. Excellent salary and benefit pkg. Loan repayment option. Live, hike, and kayak among snow capped mountains, an island studded coastline, whales, and bald eagles. CV and questions to [tina.lee@searhc.org](mailto:tina.lee@searhc.org) or (907) 966-8611. Visit us at [www.searhc.org](http://www.searhc.org).

### **Family Practice Physician**

#### **Sonoma County Indian Health Project; Santa Rosa, California**

The Sonoma County Indian Health Project (SCIHP) in Santa Rosa, California is seeking a full-time BC/BE Family Practice Physician to join our team. SCIHP is a comprehensive community care clinic located in the northern Californian wine country. Candidates must currently hold a California Physician/Surgeon license. Inpatient care at the hospital is required. For the right candidate, we offer a competitive salary, excellent benefits, and an opportunity for loan repayment. For more information, please contact Bob Orr at (707) 521-4654; or by e-mail at [Bob.Orr@crihb.net](mailto:Bob.Orr@crihb.net).

### **Family Practice Physician/Medical Director American Indian Health and Family Services of Southeastern Michigan; Dearborn, Michigan**

American Indian Health and Family Services of Southeastern Michigan (*Minobinmaadziwin*) (AIHFS) is a non-profit ambulatory health center, founded 1978. AIHFS provides quality, culturally integrated, medical and preventative dental care in addition to comprehensive diabetes prevention and treatment. All of AIHFS programs integrate traditional Native American healing and spiritual practices with contemporary western medicine in both treatment and prevention.

AIHFS is seeking a full time primary care and family practice physician/medical director. This involves the delivery of family oriented medical care services as well as general professional guidance of primary care staff. The incumbent will also function as the Medical Director, who will collaborate with fellow physicians and the Executive Director on

administrative operations of the medical, dental, and behavioral health services.

Please send a cover letter (include the position that you are applying for, a summary of your interests and qualifications for position), minimum salary requirement, resume, and a list of three professional references with contact information to American Indian Health and Family Services of Southeastern Michigan, Inc., Attn: Jerilyn Church, Executive Director, P.O. Box 810, Dearborn, Michigan; fax: (313) 846-0150 or e-mail [humanresources@aihfs.org](mailto:humanresources@aihfs.org).

### **Pediatrician**

#### **Nooksack Community Clinic; Everson, Washington**

The Nooksack Community Clinic in Everson, Washington is seeking an experienced pediatrician to take over the successful practice of a retiring physician. The clinic provides outpatient care to approximately 2,000 members of the Nooksack Indian Tribe and their families. The position includes some administrative/supervisory duties as well as part-time direct patient care. We are seeking a dedicated, experienced pediatrician with a special interest in child advocacy and complex psychosocial issues. This is a full time position with a competitive salary and benefits. There are no on-call, no inpatient duties, and no obstetrics. We currently are staffed with one family practitioner, one internist, one pediatrician, and one nurse practitioner. Additionally we have three mental health counselors, a state-of-the-art four-chair dental clinic, a nutritionist, a diabetic nurse educator, and an exercise counselor. We provide high quality care in an environment that prides itself on treating our patients like family.

The clinic is located in a very desirable semi-rural area of Northwest Washington, renown for its scenic beauty, quality of life, and year 'round outdoor recreation. The beautiful city of Bellingham is 20 minutes away. Vancouver, Canada is less than 90 minutes away, and Seattle is approximately a two-hour drive away. St. Joseph Hospital in nearby Bellingham offers a wide range of specialist and inpatient services, an excellent hospitalist program, as well as emergency care, lab, and imaging services, all easily accessible for our patients.

For further information, please send your CV or contact Dr. MaryEllen Shields at [nooksackclinic@gmail.com](mailto:nooksackclinic@gmail.com), or write c/o Nooksack Community Health Center, PO Box 647, Everson, Washington 98247; telephone (360) 966-2106; fax (360) 966-2304.

### **Nurse Executive**

#### **Santa Fe Indian Health Hospital; Santa Fe, New Mexico**

The Santa Fe Indian Hospital is recruiting for a quality, experienced nurse executive. The 39-bed Santa Fe Indian Hospital is part of the Santa Fe Service Unit providing services in the clinical areas of general medical and surgical care, operating room, urgent care, progressive care, and preventive health. The purpose of this position is to serve as the top level

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nurse executive for all aspects of the nursing care delivery. As Director of Nursing (DON) services, manages costs, productivity, responsibility of subordinate staff, and programs, as well as providing leadership and vision for nursing development and advancement within the organizational goals and Agency mission.

The Nurse Executive is a key member of the SFSU Executive Leadership Team and has the opportunity to coordinate clinical services with an outstanding, stable, and experienced Clinical Director and Medical Staff. The SFSU includes the hospital and four ambulatory field clinics primarily serving nine tribes. The SFSU earned 2006 Roadrunner Recognition from Quality New Mexico. The hospital is located in beautiful Santa Fe, New Mexico, filled with cultural and artistic opportunities.

Contact CAPT Jim Lyon, CEO at (505) 946-9204 for additional information.

### **Director of Nursing Acoma-Canoncito Laguna Hospital; San Fidel, New Mexico**

Acoma-Canoncito Laguna Hospital has an opening for a director of nursing. The Acoma-Canoncito Laguna Service Unit (ACL) serves three tribal groups in the immediate area: the Acoma Pueblo (population 3,500), the Laguna Pueblo (5,500) and the Canoncito Navajos (1,100). The ACL Hospital is located approximately 60 miles west of Albuquerque, New Mexico. The hospital provides general medical, pediatric, and obstetric care with 25 beds. The director of nursing is responsible for planning, organizing, managing, and evaluating all nursing services at ACL. This includes both the inpatient and outpatient areas of the service unit. The director of nursing participates in executive level decision making regarding nursing services and serves as the chief advisor to the chief executive officer (CEO) on nursing issues. Other responsibilities include management of the budget for nursing services. For more information about the area and community, go to <http://home.Abuquerque.ihs.gov/serviceunit/ACLSU.html>. For details regarding this great employment opportunity, please contact Dr. Martin Kileen at (505) 552-5300; or e-mail [martin.kileen@ihs.gov](mailto:martin.kileen@ihs.gov).

### **Primary Care Physician (Family Practice Physician/General Internist) Family Practice Physician Assistant/Nurse Practitioner Kyle Health Center; Kyle, South Dakota**

Kyle Health Center, a PHS/IHS outpatient clinic, is recruiting for the position of general internal medicine/family practice physician and a position of family practice physician assistant/nurse practitioner. The clinic is south of Rapid City, South Dakota, and is located in the heart of the Badlands and the Black Hills – an area that is a favorite tourist destination. It is currently staffed with physicians and mid-level practitioners. It provides comprehensive chronic and acute primary and

preventive care. In-house services include radiology, laboratory, pharmacy, optometry, podiatry, primary obstetrics/gynecology, diabetic program, and dentistry. There is no call duty for practitioners. We offer competitive salary, federal employee benefits package, CME leave and allowance, and loan repayment. For further information, please contact K.T Tran, MD, MHA, at (605) 455-8244 or 455-8211.

### **Internist Northern Navajo Medical Center; Shiprock, New Mexico**

The Department of Internal Medicine at Northern Navajo Medical Center (NNMC) invites board-certified or board-eligible internists to interview for an opening in our eight-member department. NNMC is a 75-bed hospital in Shiprock, New Mexico serving Native American patients from the northeastern part of the Navajo Nation and the greater Four Corners area. Clinical services include anesthesia, dentistry, emergency medicine, family practice, general surgery, internal medicine, neurology, OB/Gyn, optometry, orthopedics, ENT, pediatrics, physical therapy, and psychiatry. Vigorous programs in health promotion and disease prevention, as well as public health nursing, complement the inpatient services.

The staff here is very collegial and unusually well trained.

A vigorous CME program, interdepartmental rounds, and journal clubs lend a decidedly academic atmosphere to NNMC. Every six weeks, the departments of internal medicine and pediatrics host two medical students from Columbia University's College of Physicians and Surgeons on a primary care rotation. In addition, we have occasional rotating residents to provide further opportunities for teaching.

There are currently eight internists on staff, with call being about one in every seven weeknights and one in every seven weekends. We typically work four 10-hour days each week. The daily schedule is divided into half-days of continuity clinic, walk-in clinic for established patients, exercise treadmill testing, float for our patients on the ward or new admissions, and administrative time. On call, there are typically between 1 and 4 admissions per night. We also run a very active five-bed intensive care unit, where there is the capability for managing patients in need of mechanical ventilation, invasive cardiopulmonary monitoring, and transvenous pacing. The radiology department provides 24-hour plain film and CT radiography, with MRI available weekly.

The Navajo people suffer a large amount of diabetes, hypertension, and coronary artery disease. There is also a high incidence of rheumatologic disease, tuberculosis, restrictive lung disease from uranium mining, and biliary tract and gastric disorders. There is very little smoking or IVDU among the Navajo population, and HIV is quite rare.

Permanent staff usually live next to the hospital in government-subsidized housing or in the nearby communities of Farmington, New Mexico or Cortez, Colorado, each about 40 minutes from the hospital. Major airlines service airports in Farmington, Cortez, or nearby Durango, Colorado.

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Albuquerque is approximately 3½ hours away by car.

The great Four Corners area encompasses an unparalleled variety of landscapes and unlimited outdoor recreational activities, including mountain biking, hiking, downhill and cross-country skiing, whitewater rafting, rock climbing, and fly fishing. Mesa Verde, Arches, and Canyonlands National Parks are within a 2 - 3 hour drive of Shiprock, as are Telluride, Durango, and Moab. The Grand Canyon, Capitol Reef National Park, Flagstaff, Taos, and Santa Fe are 4 - 5 hours away.

If interested, please contact Eileen Barrett, MD, telephone (505) 368.7035; e-mail [eileen.barrett@ihs.gov](mailto:eileen.barrett@ihs.gov).

**Family Practice Physicians  
Medical Clinic Manager  
North Olympic Peninsula, Washington State**

The Jamestown Family Health Clinic is seeking two BC/BE full spectrum family practice physicians with or without obstetrical skills. The clinic group consists of five FP physicians, two OB/GYN physicians, and five mid-level providers. The clinic is owned by the Jamestown S'Klallam Tribe and serves tribal members and approximately 9,000 residents of the north Olympic Peninsula. The practice includes four days per week in the clinic and inpatient care at Olympic Medical Center. OMC is family medicine friendly with hospitalists who cover nighttime call and are available to assist with most hospital rounding. Our practice fully utilizes an electronic medical record system (Practice Partner) and participates in the PPRI net research affiliated with Medical University of South Carolina. The clinic serves as a rural training site for the University of Washington Family Medicine residency.

The Jamestown S'Klallam Tribe provides a competitive salary and unbeatable benefit package including fully paid medical, dental, and vision coverage of the physician and family. The north Olympic Peninsula provides boating opportunities on the Strait of San Juan de Fuca, and hiking, fishing, and skiing opportunities in the Olympic Mountains and Olympic National Park. Our communities are a short distance from Pacific Ocean beaches, a short ferry ride away from Victoria, BC, and two hours from Seattle.

Send CV to Bill Riley, Jamestown S'Klallam Tribe, 1033 Old Blyn Highway, Sequim, Washington 98382, or e-mail [briley@jamestowntribe.org](mailto:briley@jamestowntribe.org).

The Medical Clinic Manager is responsible for management and staff supervision of the multiple provider clinic in Sequim, Washington. Clinic services include primary care and OB/GYN. Send cover letter and resume to Jamestown S'Klallam Tribe, 1033 Old Blyn Highway; Sequim Washington 98382, Attn: Bill Riley; or fax to (360) 681-3402; or e-mail [briley@jamestowntribe.org](mailto:briley@jamestowntribe.org). Job description available at (360) 681-4627.

**Chief Pharmacist  
Deputy Chief Pharmacist  
Staff Pharmacists (2)  
Hopi Health Center; Polacca, Arizona**

The Hopi Health Care Center, PHS Indian Health Service, is located on the Hopi Indian Reservation in beautiful northeastern Arizona. HHCC is a critical access hospital with an inpatient unit consisting of four patient beds plus two labor and delivery suites, emergency room, and a large outpatient clinic. The HHCC serves the Hopi, Navajo and Kiabab/Paiute Tribes. Housing, sign-on bonus and/or moving expenses are available for eligible applicants. The Hopi people are rich in culture, customs, and traditions and live atop the peaceful mesas. Applications are available on-line at [www.ihs.gov](http://www.ihs.gov), or contact Ms. April Tree at the Phoenix Area Office at (602) 364-5227.

**Nurse Practitioners  
Physician Assistant  
Aleutian Pribilof Islands Association (APIA); St. Paul and Unalaska, Alaska**

Renown bird watcher's paradise! Provide health care services to whole generations of families. We are recruiting for mid-level providers for both sites, and a Medical Director for St. Paul and a Clinical Director for Unalaska, Alaska.

Duties include primary care, walk-in urgent care, and emergency services; treatment and management of diabetes a plus. Must have the ability to make independent clinical decisions and work in a team setting in collaboration with referral physicians and onsite Community Health Aide/Practitioners. Sub-regional travel to other APIA clinics based on need or request. Graduate of an accredited ANP or FNP, or PA-C program. Requires a registration/license to practice in the State of Alaska. Credentialing process to practice required. Knowledge of related accreditation and certification requirements. Minimum experience 2 - 3 years in a remote clinical setting to include emergency care services and supervisory experience. Indian Health Service experience a plus. Will be credentialed through Alaska Native Tribal health Consortium. Positions available immediately. Work 37.5 hours per week.

Salary DOE + benefits. Contractual two year commitment with relocation and housing allowance. Job description available upon request. Please send resumes with at least three professional references to Nancy Bonin, Personnel Director, via email at [nancyb@apiai.org](mailto:nancyb@apiai.org).

**Family Practice Physician  
Dentist  
Northeastern Tribal Health Center; Miami, Oklahoma**

The Northeastern Tribal Health Center is seeking a full-time Family Practice Dentist and a Family Practice Physician to provide ambulatory health care to eligible Native American beneficiaries. The Health Care Center is located in close

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proximity to the Grand Lake area, also with thirty minute interstate access to Joplin, Missouri. The facility offers expanded salaries, excellent benefits, loan repayment options, no weekends, and no call. To apply please submit a current resume, certifications, and current state license. Applicants claiming Indian preference must submit proof with their resume. Applicants will be required to pass a pre-employment drug screen and complete a background check. To apply, send requested documents to Northeastern Tribal Health Center, P.O. Box 1498, Miami, Oklahoma 74355, attention: Personnel. The phone number is (918) 542-1655; or fax (918) 540-1685.

### **Internal Medicine and Family Practice Physicians Yakama Indian Health Center; Toppenish, Washington**

Yakama Indian Health Center in Toppenish, WA will soon have openings for internal medicine and family practice physicians. The current staff includes four family physicians, two pediatricians, one internist, five nurse practitioners, and a physician assistant. The clinic serves the 14,000 American Indians living in the Yakima Valley of south central Washington. Night call is taken at a local private hospital with 24/7 ER coverage. The on-call frequency is about 1 out of 7 nights/weekends. The area is a rural, agricultural one with close proximity to mountains, lakes, and streams that provide an abundance of recreational opportunities. The weather offers considerable sunshine, resulting in the nearest city, Yakima, being dubbed the "Palm Springs of Washington." Yakima is about 16 miles from Toppenish, with a population of 80,000 people. There you can find cultural activities and a college. For further information, please call or clinical director, Danial Hocson, at (509) 865-2102, ext. 240.

### **Emergency Department Physician/Director Kayenta Health Center; Kayenta, Arizona**

Kayenta is unique in many ways. We are located in the Four Corners area on the Navajo Indian Reservation as part of the Indian Health Service/DHHS. We have challenging assignments, beautiful rock formations, movie nostalgia, ancient ruins, and wonderful clientele to care for. We are within one hundred and fifty miles from the Grand Canyon and one hundred miles from Lake Powell, which offers boating, fishing, water skiing, and camping. World class skiing resorts and winter sports are just a few hours away in Colorado and Utah. Kayenta is a great place to raise a family with stress free living in a small hometown setting.

Working for Kayenta Health Center provides a unique opportunity. Because of our remote location and underserved population, you may be eligible for loan repayment and can be making a real difference in the world.

We are currently recruiting for a BC/BE emergency department physician and director to work in our 24-hour, eight bed facility. This is a great opportunity to join our multi-specialty ten member medical staff and nursing team. This position will be supported by dynamic outpatient clinical

services, including dental, optometry, mental health, public health nursing, pharmacy, radiology, environmental health services, and nutrition.

If interested in this exciting employment opportunity, please contact Stellar Anonye Achampong, MD, Clinical Director, at (928) 697-4001; e-mail [stellar.anonye@ihs.gov](mailto:stellar.anonye@ihs.gov); or send CV to Human Resources/Melissa Stanley, PO Box 368, Kayenta, Arizona 86033; telephone (928) 697-4236.

### **Multiple Professions Pit River Health Service, Inc.; Burney, California**

Pit River Health Service is an IHS funded rural health clinic under P.L.93-638 in northern California that provides medical, dental, outreach, and behavioral health. We are seeking several professional positions to be filled. We are looking for a Health Director to administer and direct the program to fulfill the Pit River Health Service, Inc.'s primary mission of delivering the highest possible quality of preventative, curative and rehabilitative health care to the Indian people served; a Dental Director to plan and implement the dental program and supervise dental staff; a Public Health Nurse or Registered nurse seeking a PHN license to provide public health nursing and to coordinate and supervise Community Health Services program; a Behavioral Health Director/LCSW as an active member of an interdisciplinary team providing prevention, intervention, and mental health treatment services to clients; and a Registered Dental Assistant.

Burney is located about 50 miles northeast of Redding, California in the Intermountain Area. The Intermountain Area offers plenty of recreational opportunities such as fishing, hiking, camping, boating, and hunting, with a beautiful landscape. Snow skiing is within an hour's drive away. The Intermountain Area is a buyers market for homes, as well. All available positions require a California license and/or certification. To apply for employment opportunities and for more information, please contact John Cunningham; e-mail [johnnc@pitriverhealthservice.org](mailto:johnnc@pitriverhealthservice.org); or telephone (530) 335-5090, ext. 132.

### **Family Practice Physician Internal Medicine Physician Psychiatrist Winslow Indian Health Care Center; Winslow, Arizona**

The Winslow Indian Health Care Center (WIHCC) in northern Arizona is currently looking for primary care physicians in family practice, internal medicine, and psychiatry. We have a staff of 12 physicians, including a surgeon, and nine family nurse practitioners and physician assistants. We offer comprehensive ambulatory and urgent/emergent care to patients at our health center in Winslow, which includes a state-of-the-art, seven-bed Urgent Care Center completed in 2006. WIHCC also operates two field clinics five days a week on the Navajo Reservation, at Leupp and Dilkon. Our FPs and internist also provide inpatient

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care at the local community hospital, the Little Colorado Medical Center, where the FPs provide obstetrical deliveries with excellent back-up from the local OB-Gyn group. The psychiatrist works as part of a team consisting of one full-time psychiatric nurse practitioner, another (part-time) psychiatrist, and five Navajo counselors, providing primarily outpatient services with occasional hospital consults.

WIHCC offers an awesome mix of professional, cultural, and recreational opportunities. It is located just seven miles from the breathtaking beauty of Navajoland and its people, and 50 miles from Flagstaff – a university town with extensive downhill and cross-country skiing, where several of our employees choose to live. Attractive salary and benefits, as well as a team oriented, supportive work environment are key to our mission to recruit and retain high quality professional staff.

WIHCC became an ISDA 638 contracted site in 2002, and has experienced steady growth and enhancement of programs and opportunities since the transition from a direct IHS program. Please contact Frank Armao, MD, Clinical Director, if you are interested in pursuing an opportunity here, at [frank.armao@wihcc.org](mailto:frank.armao@wihcc.org); telephone (928) 289-6233.

**Family Practice Physician  
Peter Christensen Health Center; Lac du Flambeau,  
Wisconsin**

The Peter Christensen Health Center has an immediate opening for a board certified family practice physician; obstetrics is optional, and call will be 1/6. The facility offers competitive salaries, excellent benefits, and loan repayment options; all within a family oriented work atmosphere.

The Lac du Flambeau Indian Reservation is located in the heart of beautiful northern Wisconsin. The area's lakes, rivers, and woodlands teem with abundant wildlife, making it one of the most popular recreational areas in northern Wisconsin. The area boasts fabulous fishing, excellent snowmobiling, skiing, hunting, golf, and much more. Four seasons of family fun will attract you; a great practice will keep you.

For specific questions pertaining to the job description, call Randy Samuelson, Clinic Director, at (715) 588-4272. Applications can be obtained by writing to William Wildcat Community Center, Human Resource Department, P.O. Box 67, Lac du Flambeau, Wisconsin 54538, Attn: Tara La Barge, or by calling (715) 588-3303. Applications may also be obtained at [www.lacduflambeautribe.com](http://www.lacduflambeautribe.com).

**Primary Care Physician  
Zuni Comprehensive Community Health Center; Zuni,  
New Mexico**

The Zuni Comprehensive Community Health Center (Zuni-Ramah Service Unit) has an opening for a full-time primary care physician starting in January 2008. This is a family medicine model hospital and clinic providing the full

range of primary care -- including outpatient continuity clinics, urgent care, emergency care, inpatient (pediatrics and adults) and obstetrics -- with community outreach, in a highly collaborative atmosphere. For a small community hospital, we care for a surprisingly broad range of medical issues. Our professional staff includes 14 physicians, one PA, one CNM, a podiatrist, dentists, a psychiatrist, a psychologist, optometrists, physical therapists, and pharmacists. Our patient population consists of Zunis, Navajos, and others living in the surrounding area.

Zuni Pueblo is one of the oldest continuously inhabited Native American villages in the US, estimated to be at least 800 - 900 years old. It is located in the northwestern region of New Mexico, along the Arizona border. It is high desert, ranging from 6000 - 7000 feet elevation and surrounded by beautiful sandstone mesas, canyons, and scattered sage, juniper, and pinon pine trees. Half of our medical staff has been with us for more than seven years, reflecting the high job and lifestyle satisfaction we enjoy in this community.

For more information, contact John Bettler, MD at (505) 782-7453 (voice mail), (505) 782-4431 (to page), or by e-mail at [john.bettler@ihs.gov](mailto:john.bettler@ihs.gov). CVs can be faxed to (505) 782-4502, attn: John Bettler.

**Primary Care Physicians (Family Practice, Internal  
Medicine, Med-Peds, Peds)  
Psychiatrists  
Pharmacists  
Nurses  
Chinle Service Unit; Chinle, Arizona**

Got Hózhó? That's the Navajo word for joy. Here on the Navajo Reservation, there's a great mix of challenging work and quality of life. No rush hour traffic, no long commutes, no stressors of urban life. We walk to work (naanish) and enjoy living in our small, collegial community. Our 60-bed acute care hospital is located in Chinle, Arizona, the heart of the Navajo Nation. At work we see unique pathology, practice evidence-based medicine, and are able to utilize the full scope of our medical training. Together, we enjoy learning in an atmosphere of interdepartmental collaboration, supported by an established network of consulting specialists across the southwest. A comprehensive system of preventive programs and ancillary services allows us to provide the best possible care for our patients. During our time off, many of us explore the beautiful southwest, bike on amazing slick rock, and ski the slopes of the Rocky Mountains. It's a great life – combining challenging and interesting work with the peaceful culture of the Navajo people and the beautiful land of the southwest.

We're looking for highly qualified health care professionals to join our team. If you're interested in learning more about a place where "naanish baa hózhó" (work is joyful), contact Heidi Arnholm, Medical Staff Recruiter, Chinle Service Unit, telephone (970) 882-1550 or (928) 674-7607; e-mail [heidi.arnholm@ihs.gov](mailto:heidi.arnholm@ihs.gov).

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**Family Practice Physician  
Family Practice Medical Director  
Tanana Chiefs Conference, Chief Andrew Isaac Health  
Center; Fairbanks, Alaska**

We are seeking a board certified family practice physician, preferably with obstetrics skills for a full-time position. We will have openings in the summers of 2007 and 2008.

The facility is a multispecialty clinic providing services in obstetric/gynecology, internal medicine, and family practice. It also includes dental, optometry, pharmacy, behavioral health, community health aides, and other services. Our referral region includes 43 villages in interior Alaska covering an area the size of Texas. Fairbanks has an outstanding school system and university. We offer a very competitive salary with a great benefits package and a loan repayment plan. Commissioned Corps positions are also available. Contact Jim Kohler at (907) 459-3806 or [james.kohler@tananachiefs.org](mailto:james.kohler@tananachiefs.org).

**Family Practice Physician  
Seattle Indian Health Board; Seattle, Washington**

Full Time, Fantastic Benefits! We are recruiting for a family practice physician to join our team at the Seattle Indian Health Board in Seattle, Washington. We are a multiservice community health center for medical, dental, mental health, substance abuse, and community education services. We are looking for a physician who is familiar with health and social issues facing American Indians/Alaska Natives and a desire to promote the delivery of appropriate health services to this population.

Seattle Indian Health Board (SIHB) physicians are responsible for the delivery of quality, culturally sensitive primary medical care to the SIHB's patient population. This position provides general medical care (including diagnosis, treatment, management, and referral) to SIHB patients with acute, chronic, and maintenance health care needs. The physician chosen will also participate in the medical on-call rotation schedule and other responsibilities such as consulting and coordinating care with other practitioners, nursing, pharmacy, laboratory, and outside referral sites. He or she will provide clinic preceptorship of mid-level practitioners and patient care instruction to nurses, pharmacists, and other SIHB clinical staff. The incumbent will precept for residents for the outpatient continuity family practice clinics. In addition to supervising patient care, preceptors engage in didactic activity to enhance resident learning. The physician will also participate in quality assurance, program development, community health education/screening, and related activities. He or she will document all patient care information/treatment in problem-oriented format in the patient's medical records, as well as complete and submit encounter forms and related materials according to established procedure. Finally, the person selected will comply with SIHB policies and procedures, and the AAAHC Standards of Care.

Qualifications include board certification in family

medicine and a Washington State medical license. All applicants will be required to complete a background check. Please visit our website at [www.sihb.org](http://www.sihb.org) for more information, or you can call Human Resources at (206) 324-9360, ext. 1123.

**Primary Care Physicians  
USPHS Claremore Comprehensive Indian Health Facility;  
Claremore, Oklahoma**

The USPHS Claremore Comprehensive Indian Health Facility has openings for full-time positions for an emergency medicine physician, a surgeon, an anesthesiologist (or nurse anesthetist), an OB/GYN physician, and an internal medicine physician.

The Claremore hospital is a 50-bed specialty based comprehensive care facility, providing care through nine organized clinical services: community health, dentistry, optometry, emergency medical services, general surgery, internal medicine, obstetrics and gynecology, pediatrics, and radiology. In addition, the hospital has a six-bed intensive and coronary care unit and CAT scan equipment with 24 hour teleradiology support. The facility maintains several academic affiliations, and has a professional staff consisting of 36 staff physicians, approximately 60 contract physicians, five dentists, three nurse practitioners, a physician assistant, an optometrist, and an audiologist.

Claremore is a town of 18,000 just 21 miles northeast of the very metropolitan city of Tulsa, with a US Census county population of 560,431. Tulsa has a major airport with international flights and destinations in most major US cities, and was ranked in the top 10 southern cities in Southern Living magazine and Fodor's Travel Publications as one of its outstanding travel destinations. Tulsa's cost of living is 8 percent below the national average and has a county per capita income 11 percent above the national average. If you prefer rural living, there are many opportunities nearby. The facility is located 10 minutes from a major lake, and only one hour from a lake with over 1,100 miles of shoreline.

For more information, contact Paul Mobley, DO at (918)342-6433, or by e-mail at [paul.mobley@ihs.hhs.gov](mailto:paul.mobley@ihs.hhs.gov). CVs may be faxed to (918) 342-6517, Attn: Paul Mobley, DO.

**Family Practice Physician  
Hopi Health Care Center; Polacca, Arizona**

The Hopi Health Care Center currently has openings for family practice physicians and family nurse practitioner or physician assistants. The Hopi Health Care Center is a small, rural IHS hospital providing full spectrum family practice medical services including ambulatory care, adult/peds inpatient care, low risk obstetrics, and ER care. We currently staff for 12 full time physicians, and four full time FNP/PA positions. Our facility is located in northern Arizona, 90 miles northeast of Flagstaff and 70 miles north of Winslow, on the Hopi Indian Reservation. Services are provided to both Hopi and Navajo reservation communities. The reservation is

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located in the heart of the southwest; within a 90 mile radius are abundant mountain areas, lakes, forests, and archeological sites. The Hopi Health Care Center is a new facility established in 2000 with a full ambulatory care center environment including a dental clinic, physical therapy, optometry, and behavioral health services. We are a designated NHSC site, and qualify for the IHS Loan Repayment Program.

For more information, please contact Darren Vicenti, MD, Clinical Director at (928) 737-6141 or [darren.vicenti@ihs.gov](mailto:darren.vicenti@ihs.gov). CVs can be faxed to (928) 737-6001.

### **Family Practice Physician Chief Redstone Health Clinic, Fort Peck Service Unit; Wolf Point, Montana**

We are announcing a job opportunity for a family practice physician at the Chief Redstone Clinic, Indian Health Service, Fort Peck Service Unit in Wolf Point, Montana. This is a unique opportunity for a physician to care for individuals and families, including newborns, their parents, grandparents, and extended family. Applicants must be culturally conscious and work well within a team environment. The Fort Peck Service Unit is located in the northeast corner of Montana along the Missouri river. Fort Peck Service Unit has two primary care clinics, one in the town of Poplar and one in the town of Wolf Point.

Our Medical Staff is composed of five family practice physicians, two internal medicine physicians, one pediatrician, one podiatrist, and four family nurse practitioners/physician assistants. We have a full complement of support services, which include dental, optometry, audiology, psychology, social work, radiology, lab, public health nursing, and a very active Diabetes Department. These are ambulatory clinics; however our providers have privileges in the local community hospital. We have approximately 80,000 patient contacts per year. We work very closely with the private sector. IHS and the private hospital have a cardiac rehabilitation center. By cooperating with IHS, the hospital has been able to get a CT scanner and a mammography unit. Tribal Health has a dialysis unit attached to the Poplar IHS clinic. Customer service is our priority. The IHS has excellent benefits for Civil Service and Commissioned Corps employees. There are loan repayment options, and we are a designated NHSC site. We strive to provide quality care through a strong multidisciplinary team approach; we believe in being closely involved in our population to encourage a "Healthier Community."

There are many opportunities for recreation, as we are a short distance from the Fort Peck Dam and Reservoir. For more information about our area and community please go to the website at <http://www.ihs.gov/FacilitiesServices/AreaOffices/Billings/FtPeck/index.asp>. Fort Peck tribes also can be found on [www.fortpecktribes.org](http://www.fortpecktribes.org), and the Fort Peck Community College on [www.fpcc.edu](http://www.fpcc.edu). Northeast Montana offers many amenities one might not expect this far off the beaten path. If you are interested please contact our provider

recruiter, CDR Karen Kajiwara-Nelson, MS, CCC-A, at (406) 768-3491 or by e-mail at [karen.kajiwara@ihs.gov](mailto:karen.kajiwara@ihs.gov). Alternatively, you can contact Dr. Craig Levy at (406) 768-3491, or e-mail [craig.levy@ihs.gov](mailto:craig.levy@ihs.gov), or the Billings Area Physician Recruiter, Audrey Jones, at (406) 247-7126 or e-mail [audrey.jones@ihs.gov](mailto:audrey.jones@ihs.gov). We look forward to communicating with you.

### **Pediatrician Family Practice Physician Obstetrician/Gynecologist PHS Indian Hospital; Browning, Montana**

The Blackfeet Service Unit is recruiting for health practitioners who want to join the staff at the PHS Indian Hospital, Browning, Montana. The Blackfeet Service Unit is home to the Blackfeet Community Hospital, a 27-bed hospital, active outpatient clinic, and well-equipped emergency department. Inpatient care includes obstetrics and elective general surgery. We also offer community health nursing, an active diabetes program, optometry, laboratory, dental, and ENT services along with behavioral and social services and women's health. We are seeking candidates who are committed to improving the health of the local community and being part of a team approach to medicine. The hospital is located 13 miles from Glacier National Park. This area offers spectacular mountains and incredible outdoor activities year round. There are loan repayment options, excellent benefits, and we are a designated NHSC site. If you are interested in joining our medical team, contact Dr. Peter Reuman at [peter.reuman@ihs.gov](mailto:peter.reuman@ihs.gov) or telephone (406) 338-6150; or contact the Physician Recruiter, Audrey Jones, at [audrey.jones@ihs.gov](mailto:audrey.jones@ihs.gov) or telephone (406) 247-7126. We look forward to hearing from interested candidates.

### **Family Practice Physician Pharmacists PHS Indian Hospital; Harlem, Montana**

The Fort Belknap Service Unit is seeking family practice physician and pharmacist candidates to join their dedicated staff. The service unit is home to a critical access hospital (CAH) with six inpatient beds, two observation beds, and a 24-hour emergency room, as well as an 8 am to 5 pm outpatient clinic. The service unit also operates another outpatient clinic 35 miles south of Fort Belknap Agency in Hays. The Fort Belknap CAH outpatient visits average 39,000 per year. The new clinic in Hays, the Eagle Child Health Center, can adequately serve 13,000 per year. The medical staff includes four family practice positions, two physician assistants, and one nurse practitioner, and has implemented the Electronic Health Record in the outpatient clinic. The service unit also has a full-time staffed emergency medical services program. The staff is complemented by contract *locum tenens* physicians for weekend emergency room coverage.

The medical staff is supported by and works with a staff of

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nurses, behavior health personnel, physical therapist, lab and x-ray personnel, pharmacists, dentists, administrators, housekeepers, supply specialists, and contract practitioners to provide the best possible care to patients. The staff works as a team to make a difference. Contract (private) hospitals are from 45 to 210 miles from the facility.

There are loan repayment options, excellent benefits, and we are a designated NHSC site. The area is primarily rural, and a friendly small-town atmosphere prevails here. The reservation communities promote various local activities such as rodeos, church socials, and basketball. The tribe also manages its own buffalo herd. Bigger events fill in the calendar as well, such as the Milk River Indian Days, Hays Powwow, and the Chief Joseph Memorial Days, featuring cultural activities and traditional dancing. The Fort Belknap Tribe has hunting and fishing available both on and off the reservation. The Little Rocky Mountains and the Missouri River provides scenic and enjoyable areas for the outdoor-minded. If you are interested in joining our medical team, contact Dr. Robert Andrews at [robert.andrews@ihs.gov](mailto:robert.andrews@ihs.gov) or telephone (406) 353-3195; or contact the Physician Recruiter, Audrey Jones, at [audev.jones@ihs.gov](mailto:audev.jones@ihs.gov); telephone (406) 247-7126.

#### **Family Nurse Practitioner or Physician Assistant Fort Peck Service Unit; Poplar, Montana**

We are announcing a job opportunity for a family nurse practitioner and/or physician assistant at the Verne E Gibbs Health Center in Poplar, Montana and the Chief Redstone Health Clinic, Indian Health Service, Fort Peck Service Unit in Wolf Point, Montana. The Fort Peck Service Unit is located in the northeast corner of Montana along the Missouri river. Fort Peck Service Unit has two primary care clinics, one in the town of Poplar and one in the town of Wolf Point. The Medical Staff is composed of five family practice physicians, two internal medicine physicians, one pediatrician, one podiatrist, and four family nurse practitioners/physician assistants. We have a full complement of support services, which include dental, optometry, audiology, psychology, social work, radiology, lab, public health nursing, and a very active Diabetes Department that includes one nurse educator, one FNP, and one nutritionist.

We strive to provide quality care through a strong multidisciplinary team approach; we believe in being involved in the community to encourage a "Healthier Community."

There are many opportunities for recreation, as we are a short distance from the Fort Peck Dam and Reservoir. For more information about our area and community please go to the website at <http://www.ihs.gov/FacilitiesServices/AreaOffices/Billings/FtPeck/index.asp>. We are looking for an applicant with well rounded clinical skills. Two years experience is preferred but new graduates are welcome to apply. Northeast Montana offers many amenities one might not expect this far off the beaten path. If you are interested please contact our provider recruiter, CDR Karen Kajiwara-

Nelson, MS, CCC-A at (406) 768-3491 or by e-mail at [karen.kajiwara@ihs.gov](mailto:karen.kajiwara@ihs.gov).

#### **Family Practice Physicians Dentists Pharmacists Crownpoint Comprehensive Healthcare Facility; Crownpoint, New Mexico**

The Crownpoint IHS facility has openings for two family practitioners with low risk obstetric skills (we will consider candidates without OB skills), two pharmacists, and two general dentists. Our service unit follows a family medicine model for providing full-spectrum care to our patients, with a dynamic medical staff that finds the work here quite rewarding.

With a high HPSA rating, we are a NHSC-eligible site for payback and loan repayment.

Crownpoint is a town of about 2,500 people in the Four Corners region of New Mexico. We serve a traditional community of 25,000 Navajo people, many of whom speak only Navajo and live in traditional homes with no running water, electricity, or phone service. Our hospital has a six bed ER, a 17 bed med/peds unit, a labor and delivery/post-partum unit, and a large outpatient clinic. We have a total of 16 dental chairs, optometry, and mental health services, as well as on-site pharmacy, laboratory, radiology, and ultrasonography. Our medical/dental staff is a collegial and supportive group including ten family physicians, two pediatricians, an obstetrician/gynecologist, a psychiatrist, three PAs, three FNPs, four dentists, and a podiatrist. We have a very exciting, full-spectrum medical practice that includes high-risk prenatal care, low-risk labor and delivery, emergency room care with management of trauma and orthopedics, and an interesting inpatient medicine and pediatric service.

As primary care physicians in a rural setting, we manage a wide variety of medical problems. We care for many patients with diabetes and hypertension, but we also see some unusual illnesses such as plague, Hantavirus, and snake bites. There are many opportunities for outpatient and ER procedures including suturing, therapeutic injections, closed reductions of fractures and dislocations, para/thoracentesis, chest tubes, LPs, colposcopy, sigmoidoscopy, and OB ultrasound.

While Crownpoint is small, there is a lot to do in the surrounding area. There are two junior colleges in town where many of us have taken Navajo language, weaving, and history classes. Some have gotten involved with local churches and children's activities. Outdoor activities are plentiful, with downhill and cross-country skiing, camping, and fishing all nearby. There are several excellent mountain biking and hiking trails, as well as Anasazi ruins that are right in Crownpoint. Albuquerque is two hours away and is our nearest large city with an international airport. Other destinations that are within an afternoon's drive include Santa Fe (three hours), Durango and the Rocky Mountains (two hours), Taos (four hours), Southern Utah's Moab and Arches/Canyonlands

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National Parks (four hours), Flagstaff (three hours) and the Grand Canyon (five hours).

For more information, contact Harry Goldenberg, MD, Clinical Director, at (505)786-5291, ext.46354; e-mail [harry.goldenberg@ihs.gov](mailto:harry.goldenberg@ihs.gov); or Lex Vujan at (505) 786-6241; e-mail [Alexander.vujan@ihs.gov](mailto:Alexander.vujan@ihs.gov).

### **Family Practice Physician Pediatrician**

#### **Bristol Bay Area Health Corporation; Dillingham, Alaska**

Bristol Bay Area Health Corporation (BBAHC) is a mature tribal compact located in scenic southwestern Alaska. The Bristol Bay Area Service Unit encompasses 44,000 square miles of Alaska country bordering the Bristol Bay region of the state. Over 400 employees provide primary care to 28 villages including two sub-regional villages, and a primary care hospital, Kanakanak, located in Dillingham, Alaska. The Medical Staff consists of nine family physicians, a pediatrician, a nurse midwife, four dentists, a physical therapist and an optometrist, all providing primary care. The patient population consists of Yupik Eskimo, Aleut, and Athabascans who have been residents of the area for hundreds of years. Family physicians provide a broad spectrum of practice including obstetrics, inpatient medicine, emergency care and procedures such as colonoscopy, EGD, flexible sigmoidoscopy, colposcopy, and treadmill services in a very collegial and supportive atmosphere. Our solo pediatrician is allowed to practice full spectrum pediatrics with an extremely interesting patient mix and some very high risk and rare genetic disorders unique to this area. The pediatrician works in a collegial manner with family physicians and is not required to perform any adult medicine or obstetrics, but solely pediatrics.

BBAHC was the first hospital in the country to establish a 638 contract and has an extremely good working relationship with their Board of Directors. Of note, the practice here in Alaska is unique, and air travel to outlying villages is required, since continuity care to the villages is very important to our care here and is uniquely rewarding. BBAHC has an extremely competitive salary and benefits package.

If interested, please contact Arnie Loera, MD, Corporate Medical Director, at (907) 842-9218, Kanakanak Hospital/Bristol Bay Area Health Corporation, PO Box 130, Dillingham, Alaska 99576. You may also contact him by e-mail at [aloera@bbahc.org](mailto:aloera@bbahc.org). CVs can be faxed to (907) 842-9250, attn: Arnie Loera, MD. You may also view our website for information about our corporation at [www.bbahc.org](http://www.bbahc.org).

### **Medical Technologist**

#### **Tuba City Regional Health Care Corporation; Tuba City, Arizona**

The Tuba City Regional Health Care Corporation, a 73-bed hospital with outpatient clinics serving 70,000 residents of northern Arizona, is recruiting for full-time generalist medical

technologists. The laboratory has state-of-the-art equipment. We offer competitive salary, based on experience. Relocation benefits are available. New graduates are encouraged to apply for this position. Tuba City is located on the western part of the Navajo reservation approximately 75 miles north of Flagstaff, Arizona, with opportunities for outdoor recreation and cultural experiences with interesting and adventurous people.

For more information, please contact Minnie Tsingine, Laboratory Supervisor, at (928) 283-2716 or [minnie.tsingine@tchealth.org](mailto:minnie.tsingine@tchealth.org). For an application, please contact Human Resources at (928) 283-2041/2432 or [michelle.francis@tchealth.org](mailto:michelle.francis@tchealth.org).

### **Family Practice Physician**

#### **Gallup Indian Medical Center; Gallup, New Mexico**

The Gallup Indian Medical Center has an immediate opening for a family medicine physician. GIMC is one of the largest Indian Health Service sites. The IHS has great benefits packages for both Civil Service and Commissioned Corps providers. We are an NHSC scholarship and an IHS Loan Repayment site as well. The Department of Family Medicine offers the opportunity for full spectrum family medicine care. There are currently nine physicians, two physician assistants, and one pharmacist clinician in the department. Chronic disease management and prevention are the focus for continued development and expansion of this department and program. The hospital has a multi-specialty group, and family medicine physicians have inpatient privileges at GIMC as well as at the community hospital, Rehoboth McKinley Christian Hospital.

Please contact Dr. Alma Alford, Chief of Family Medicine, if you are interested in pursuing an opportunity here.

The address is Gallup Indian Medical Center, 516 E. Nizhoni Blvd., P.O. Box 1337, Gallup, New Mexico 87301-1337; telephone (505) 722-1000; fax (505) 726-8740; office number (505) 722-1280 or 722-1775; e-mail [alma.alford@ihs.gov](mailto:alma.alford@ihs.gov).



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