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Introduction to the July 2012 Special Issue on Injury Prevention

Lawrence Berger, MD, MPH, Clinical Assistant Professor of Pediatrics, University of New Mexico, Albuquerque, New Mexico

The three articles in this special issue on injury prevention illustrate the four guiding principles of the IHS Injury Prevention Program: partnerships and collaboration, capacity building, community-based prevention, and reliable data (*IHS Provider*, September 2007, pages 274 - 280). Bales, et al describe the many challenges to obtaining reliable injury data for tribes that span across multiple states and that are not served by a local IHS or tribal medical facility. Once the necessary paperwork was completed, it took between 24 hours and 6 months for data to arrive! Bowser and Williams implemented a pilot project using GPS devices to speed emergency response times. They not only enhanced the EMS capacity in one district of the Tohono O'odham Nation, but also established a system that can benefit every outreach program, including public health nursing, CHRs, and environmental health. "Tools for Community Engagement" describes some of the issues in promoting community involvement in each step of the public health model, from planning, to implementation, to evaluation. Included in the community engagement toolbox are approaches that blend the ancient tradition of storytelling with digital cameras and photo-editing software. Obviously, the field of injury prevention thrives on contributions from many sources, including science, technology, epidemiology, community development, and traditional wisdom. It is the foundation for its success and sustainability.

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Developing A Global Positioning System (GPS) to Improve Emergency Response on the Tohono O'odham Nation

Travis R. Bowser, MS, Environmental Health Officer, Sells Service Unit, Sells, Arizona, and Don Williams, REHS, MPH, DAAS, CDR, US Public Health Service, IHS Tucson Area Injury Prevention Specialist, Tucson, Arizona

Introduction

Rapid emergency response times can mean the difference between life and death. Getting to the scene quickly makes it more likely that medical responders can deliver emergency care to victims of falls, heart attacks, and strokes; police can intervene in violent disputes before they become lethal; and firefighters can rescue occupants before structures are consumed by flames.

The Tohono O'odham Nation (TON) faces many challenges to rapid emergency response times. Located in southern Arizona, the TON is very large and rural, encompassing 4,460 square miles of rugged Sonoran Desert. It has eleven political districts, nine of which are contiguous.1 For most of the TON there are no formal addresses for homes nor are there street names within the communities. Therefore, there is no 911 addressing system for first responders to use during emergencies. Typically responders are given the name of the community to which they are responding and a series of physical landmarks coupled with characteristics of the home or location (colors, vehicles, mile markers, etc.). This can make it very difficult to locate homes, especially at night. It is not uncommon for responders to radio back to the dispatch office during a response because they are having difficulty finding a home within a community. This can potentially further delay an already lengthy response.³ In some of the more rural areas, it can take an hour or more from the time a 911 emergency call is made until the responders arrive on-scene.

The purpose of this project was to see if response times could be improved by instituting a GPS-based emergency response system at one district of the TON.² Although GPS has been utilized in Indian Country for motor vehicle injury prevention,^{3,4} we did not find any articles about its use to enhance emergency response in rural American Indian communities.

Methods

Background

The Tohono O'odham Nation Fire Department (TONFD)

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and Emergency Medical Services (EMS) are dispatched out of a central office in Sells, Arizona, capital of the TON. Indian Health Service (IHS) EMS responders provide services to the eastern districts of the TON. EMS responders for the town of Ajo, Arizona, cover the western districts. The Tohono O'odham Police Department (TOPD) is dispatched from an office in Sells that is geographically separate from the TONFD. Both the TONFD and Ajo EMS have several remote stations throughout the TON.

We obtained permission to publish this project from the Pisinemo District Chairperson and the national IHS IRB.

Design

We chose the Pisinemo District for this pilot project because we had the enthusiastic support of the District Chairman, TONFD Chief, and Ajo EMS Chief. All of the communities are served by a TONFD fire truck (E-233) and an Ajo EMS ambulance (M-43) based in the town of San Simon (Figure 1). Other ambulances respond to this district, but only when M-43 is out of service or otherwise not available. The TONFD Chief not only agreed to the project, but provided an Assistant Battalion Chief as a point of contact. The Chief of Ajo EMS also agreed to the use of a GPS device by personnel in ambulance M-43. We also obtained permission from the IHS EMS Chief, as his agency is in charge of the dispatch office for the entire TON (with the exception of the TOPD). He also allowed us to access all of the run logs to calculate pre- and post-intervention response times for the district. In addition to meeting with the District Chairman and other agency representatives, we presented at the local monthly community meetings. There we discussed the purpose and activities of our proposed project with residents of the District.

Our target population was any home in the Pisinemo district making a 911 call and receiving a response from either the fire truck or ambulance stationed in San Simon. To obtain GPS coordinates for each home, we met with the TON Housing Authority and the TON Utility Authority. Both entities had the GPS data, but were unable to share the information due to privacy and legal concerns. We were more successful with the Tucson Area IHS Division of Sanitation Facilities Construction (SFC) engineers. For each home on the TON, they had GPS coordinates located on a .kmz file within Google Earth. Each home had the homeowner's name attached to it or





was listed as "vacant." In obtaining the file for the Pisinemo district, the names and all personal information were removed.

We then assigned each home a number consisting of a community prefix and two-digit suffix (e.g., PS-2 or SC-6). A total of 236 homes (both occupied and vacant) were assigned numbers. With 143 homes, the community of Pisinemo was the largest of the seven communities in the Pisinemo district.

The GPS locations were then loaded onto handheld GPS units using a software program called "Expert GPS." "Expert GPS" automatically converted the Google Earth .kmz file with the home coordinates into the GPS format based on degrees, minutes, and seconds. The latter information was saved to a new ".gpx" file that could be transferred to the handheld GPS units. Two of these GPS units were provided to the San Simon station, one for the TONFD truck (E-233), and one for the Ajo EMS ambulance (M-43). Color printouts of an aerial view of the District showing all the homes and their assigned numbers from the Google Earth .kmz files were provided to responders at the San Simon station, the TONFD Assistant Battalion Chief, and the dispatchers in the Sells dispatch office.

We took several steps to ensure that each resident was aware of their assigned home number. We prepared a cover letter to residents explaining the project's purpose and methods. We provided two business card-sized magnets to each home with the home numbers written with permanent markers. These magnets could be placed on a refrigerator or in some other obvious location so the home owner could refer to it in case of an emergency. We also distributed highly-visible, fluorescent yellow, laminated sheets with each home's number in bright red marker. The sheets could be posted in a window or outside where they would be easily visible to responding personnel.

We visited every home in the Pisinemo District to deliver the letter, magnets, and sheets with home numbers. If the resident was at home, they were given the information and an explanation of the project. If the resident was not home, the materials were put in a large envelope and left on or inside their front door. In addition, the numbered yellow sheets were posted on each vacant house for firefighters or for other purposes where ease of location would be beneficial.

Data Collection

Each response on the TON for TONFD and EMS is hand written on a "run sheet" at the dispatch office in Sells. The dispatchers typically record four time elements for each response: (1) the dispatch time when they notify the responders a response is required, (2) the time when the responders indicate they are leaving the station, (3) the time when the responders arrive at the destination, and (4) the "in-service" time when the responders have completed the response and are available once again. For our purposes, "response time" was calculated as the difference between the times (2) and (3). The nine months of January 1 to September 31, 2011 were the baseline period and the four months between October 1, 2011, and January 31, 2012 were the intervention period. After the intervention period, we conducted interviews with district representatives, the IHS dispatchers, and staff from the TON fire department and Ajo EMS service. These interviews focused on possible obstacles to full implementation of the project and levels of satisfaction with the GPS system.

Results

There were 133 runs made by M-43 (ambulance) and E-233 (fire truck) to the Pisinemo District during the baseline period. Of these, 89 runs were made by E-233 and 44 by M-43. All of the runs during the baseline period were to the communities of Pisinemo, San Simon, and Santa Cruz. There was one run to the community of Kupk that was omitted, as it was the only run to that community for the entire project timeline. During the intervention period, there were 62 runs made by M-43 and E-233: 40 runs by E-233 and 22 by M-43. Ajo EMS ambulances other than M-43 made 31 runs to the Pisinemo District during the baseline period and 13 runs during the intervention. Response times for these runs were excluded from our analysis because these other ambulance had not been provided with GPS devices.

The average response time for the combined ambulance and fire truck runs during the baseline period was 16.8 minutes and 13.9 minutes during the intervention period (Figure 2). This result was statistically significant at the 0.05 level (2tailed, unpaired, t-test, t = 2.33). Table 1 demonstrates that response times varied by community, responder (ambulance or fire truck), and period (baseline vs. intervention). San Simon showed no difference in average response times. For Santa Cruz, fire truck response times actually increased slightly (by half a minute). The 7.7 minute decline for ambulance response to the Santa Cruz community was based on a single run during the intervention period.

Discussion

The 3-minute decline in overall average response time, although statistically significant, was a modest one. One reason was that the pilot system was not used to its full potential.



Figure 2. Average Overall Response Times (minutes)

District Responder	Baseline	Intervention	Difference
Pisinemo			
Fire E-233	20.2 (n=62)	18.3 (n=21)	-1.9
EMS M-43	17 (n-28)	16.5 (n-11)	-0.5
San Simon			
Fire	6.4 (n=18)	6.4 (n=14)	0
EMS	6.3 (n=13)	6.3 (n=10)	0
Santa Cruz			
Fire	24.7 (n=9)	25.2 (n=5)	+0.5
EMS	24.7 (n=3)	17 (n-1)	-7.7

Table 1. Average response times by community and responder in minutes.

There were instances where homeowners failed to report their house numbers, the numbers were not relayed to the responders by the dispatchers, or the responders did not use the GPS devices. Both Ajo EMS and TONFD work on a rotational schedule; important information was not always relayed to new personnel. The GPS devices themselves proved to be a limitation. The hand-held units required time to track satellites when turned on. This made it difficult for the responders to use them during the short runs to San Simon. The devices need a clear line-of-sight to function, requiring the responders to hold them near a window in the vehicle while driving to the scene. Detailed analysis by responder and community was limited by small sample sizes. Finally, we did not control for other factors that contribute to response times and which may have varied between baseline and intervention periods. These include time of day (night vs. day), nature and urgency of the call, and weather conditions.5

Among the unanticipated consequences of this project were the value of the aerial maps and the use of the GPS coordinates for non-emergency purposes. On several occasions, the dispatchers used the hard copy aerial maps with the home numbers to help the responders locate homes. I used the handheld GPS unit to quickly and accurately locate a home in San Simon for an environmental health visit. Other agencies and services on the TON, such as public health nurses and Community Health Representatives, can expedite their home visits using the home numbering and GPS system.

At a Pisinemo District meeting in March, 2012, residents stated that they are using the home numbers and would like to continue to do so. The TONFD now has laptops in each of their fire engines and will likely purchase GPS software for them. Expanding the enhanced emergency response system throughout the Tohono O'odham Nation will require additional funding, training, and strategic planning. Most importantly, it will require collaboration among numerous agencies, including EMS, fire, police, and the TON Office of Emergency Management.

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Creating a Multi-State Injury Surveillance System for Two American Indian Populations

David Bales, BS, REHS, LT, USPHS, Environmental Health Officer, Phoenix Area Indian Health Service, OEHE, Parker Indian Health Center, Parker, Arizona; Robert Morones, MPH, District Injury Prevention Officer, Office of Environmental Health and Engineering, Tempe, Arizona; Vince Garcia, MPH, District Environmental Health Officer, Office of Environmental Health and Engineering, Tempe; and Sarah Snyder, BS, Service Unit Environmental Health Officer, Phoenix Area IHS, Office of Environmental Health and Engineering, Parker

Introduction

Injuries are the leading cause of death for those 1 - 44 years of age.¹ Injuries cost an estimated \$406 billion annually in medical costs and lost productivity.² In 2007, injuries accounted for 51% of all deaths among people ages 1 - 44 years of age, more deaths than non-communicable diseases and infectious diseases combined.³

The first step to effectively prevent injuries is to identify the frequency and type of injuries occurring at the local level. This can be a surprisingly difficult task. A request was made to IHS Environmental Health staff by Fort Mojave Clinic personnel to provide data on the injury problems and trends at Fort Mojave. The Fort Mojave Tribe and the neighboring Chemehuevi Tribe are located on Federal reservations that span three states: Arizona, California, and Nevada. The two communities depend on non-IHS emergency rooms for trauma care. Using ER logs at IHS facilities to implement a severe injury surveillance system (as many other service units have done) was therefore not possible for these two tribes. We sought to build an injury surveillance system based on emergency room, hospitalization, and mortality databases maintained by each state. We hoped that establishing the framework for this type of surveillance system would benefit many tribes in California, Nevada, and Arizona.

Methods

We obtained permission from both the Fort Mojave and Chemehuevi Tribal Councils to conduct this project and publish this paper. We completed data-sharing agreements with each of our target hospitals. We also obtained approval from the IHS Phoenix Area IRB to publish.

Our project population was Native Americans living in the zip codes located within the boundaries of both reservations. We obtained the zip codes from tribal members living on the

reservations by text-messaging the emergency preparedness coordinators at the two tribes and verified the zip codes using the US postal service website.⁴ We determined that the Chemehuevi Tribe shares its zip code with the Fort Mojave Tribe. Therefore, the surveillance system contains injury data from both tribes.

Patient Discharge Data and Emergency Department Data. We interviewed clinic staff, tribal members, Emergency Medical Services (EMS) personnel, care flight personnel, and the tribal emergency preparedness coordinators to determine which hospitals were utilized most often by tribal members with injuries. We then conducted phone interviews with staff at each of the five main hospitals on how best to obtain their injury data. We learned that all hospital discharge and emergency room data were reported to centralized data collection offices within each state (Figure 1). Arizona, California and Nevada require all non-federal hospitals to report PDD and EDD data to the state.

The target population and case definition for our data requests were:

- Patients who required a hospitalization or emergency department visit;
- Received an ICD-9 diagnosis code (N-code) between 800.01 999.9;
- Received the diagnosis between 01/01/2001 and 12/31/2010; OR
- All Fatalities between 01/01/2001 and 12/31/2010;
- Race = Native American;
- Resided in locations with the specific zip codes for the two reservations.

The process for obtaining the injury data from each state source was as follows:

California Office of Statewide Health Planning and Development (OSHPD). We completed a request for nonpublic, patient-level data. The request was denied by the Committee for the Protection of Human Subjects (CPHS) because the IHS was not listed in the California Health and Safety (CHS) Code as an approved recipient of data. The CDC, which was listed as an approved recipient, declined to submit the data request on our behalf. The OSHPD ultimately waived the requirement and plans to update the CHS Code to include IHS on the list of approved data recipients. It took approximately six months to obtain the data from California.

University of Nevada Las Vegas, Center for Health



Figure 1. Each main hospital treating individuals from our two communities reports utilization data to its respective state's hospital data collection office.

Information Analysis. We submitted the data request form via e-mail and received the electronic data within 24 hours.

Arizona Department of Health Services, Bureau of Public Health Statistics. Because the Phoenix Area IHS already had a data-sharing agreement with the state of Arizona, we obtained our requested data in three months.

We obtained injury mortality data from each state's vital statistics agency:

California Department of Public Health, Health Information and Research Section. We submitted our data request form, a vital statistics data files application, and an access agreement. IHS purchased the data at a cost of \$100 per year (\$900 total) and the data were received within three months.

Nevada Department of Health and Human Services, Nevada State Health Division. We submitted the data request form and signed a data-sharing agreement. The mortality data were received in approximately one month.

Arizona Department of Health Services, Vital Statistics. The data-sharing agreement between the Phoenix Area IHS and the state of Arizona also covered vital statistics data.

We combined the data from our six sources using

Microsoft Office Excel[®] 2007. We merged common variables and then analyzed the data using CDC Epi Info 7. Individual patient ages had to be aggregated into age groups to be consistent with the Nevada patient discharge data (PDD). To protect patient confidentiality, Nevada reports age groups only.

The results of the analyses were then transferred back into MS Excel to construct tables and figures. Rates were calculated using the IHS user population as denominators.⁵

Results

We identified reliable injury data sources from all three states to provide injury surveillance data to the Fort Mojave and Chemehuevi Tribes. While many of the states had been working to establish a centralized system for several years, all of them had arrived at a reliable collection process by 2008. Table 1 shows the status of the centralized electronic injury data components by year for each of our state sources. Table 2 summarizes the process of obtaining the data from each data source.

In 2008 and 2009, the patient discharge data (PDD), emergency department data (EDD), and injury mortality data were available from each state. During those two years, there

Table 1. Data availability by source

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
CA (OSHPD) -PDD	χ	χ	χ	χ	χ	χ	χ	χ	χ	χ
AZ-PDD				χ	χ	χ	χ	χ	χ	χ
NV (UNLV)-PDD	χ	χ	χ	χ	χ	χ	χ	χ	χ	χ
AZ-EDD								χ	χ	χ
NV (UNLV)-EDD								χ	χ	
CA (OSHPD)-EDD					χ	χ	χ	χ	χ	χ
CA Vital Statistics	χ	χ	χ	χ	χ	χ	χ	χ	χ	
AZ Vital Statistics	χ	χ	χ	χ	χ	χ	χ	χ	χ	χ
NV Vital Statistics						χ	χ	χ	χ	χ

Abbreviations:

OSHPD: Office of Statewide Health Planning and Development UNLV: University of Nevada Las Vegas PDD: patient discharge data EDD: emergency department data

Table 2: Data Source Summary

Data Sources	Request	Receipt	Cost of	Format of	
	method	Time	Data Set	data set	
CA (OSHPD) -PDD	Form	6 Months	\$0	MS Excel	
AZ-PDD	Email request	3 Months	\$0	MS Excel	
NV (UNLV)-PDD	Email request	24 hours	\$0	Email	
AZ-EDD	Email request	3 Months	\$0	MS Excel	
NV (UNLV)-EDD	Email request	24 hours	\$0	Email	
CA (OSHPD)-EDD	Form	6 Months	\$0	MS Excel	
CA Vital Statistics	Form	3 Months	\$90 per year	Win ZIP	
AZ Vital Statistics	Email request	3 Months	\$0	MS Excel	
NV Vital Statistics	Form	1 Month	\$0	MS Excel	

Abbreviations:

OSHPD: Office of Statewide Health Planning and Development UNLV: University of Las Vegas PDD: patient discharge data EDD: emergency department data Figure 2. Injury cases in 2008 and 2009 on the Fort Mojave and Chemehuevi Reservations.



were a total of 540 injuries among Native Americans on the Fort Mojave and Chemehuevi reservations. Of the 540 injuries, there were 2 deaths, 22 hospitalizations, and 516 emergency room visits (Figure 2).

Of the 540 reported injuries, the five leading underlying causes were falls (32%), struck by/against (14%), overexertion (11%), cut/pierce (11%), motor vehicle crash or MVC (10%), and assault (9%) (Table 3). Categorized by intent, the injuries were unintentional (90%), assaults (9%), self-inflicted (1%), and undetermined (0.4%).

Several categories of injury in Table 3 (such as "struck by/against," "overexertion," and "cut/pierce") are non-specific and are usually associated with injuries that are relatively minor (i.e., are "treated and released" from the emergency room rather than hospitalized). Table 4 summarizes the injury causation categories that are more specific, usually more severe, and accounted for at least 10 injuries in the dataset. Falls (61%), motor vehicle crashes (19%), and assaults (17%) were the top three categories.

Discussion and Recommendations

This project provides the framework for an injury surveillance system that can be utilized by tribes in Arizona, California, and Nevada to prioritize resources and evaluate programs. Injury mortality data are available from each of the three states for the years 2006 to 2010; patient discharge data from 2004 to 2010; and emergency room data from 2008 and 2009 (Table 1).

We analyzed the data from all six data sources for the years 2008 and 2009 to determine the three leading specific causes of injury for our two tribes: falls, motor vehicle crashes, and assaults.

Strategies to reduce these injuries include exercise programs, medication management, and home modifications to reduce falls; sobriety checkpoints and occupant restraint laws to reduce motor vehicle-related injuries; and partnerships Table 3: Distribution of underlying causes of injury in2008-2009 resulting in an emergency department visit,hospitalization or death among Native Americans on theFort Mojave & Chemehuevi Reservations

Underlying causes of injury	Number	Percent
Fall	175	32%
Struck by, against	73	14%
Overexertion	60	11%
Cut/pierce	59	11%
MVC	55	10%
Assault	48	9%
Miscellaneous other	27	5%
Natural environmental	23	4%
Poisoning	10	2%
Other (less than 10 cases		
per category)	10	2%
TOTAL	540	100%

Table 4: Distribution of specific causes of 10 or more injuries in 2008-2009 resulting in an emergency department visit, hospitalization, or death among Native Americans on the Fort Mojave & Chemehuevi Reservations.

TOTAL	540	100%
Specific causes of injury	Number	Percent
Fall	175	61%
MVC	55	19%
Assaults	48	17%
Poisoning	10	3%
TOTAL	288	100%

among law enforcement, behavioral and environmental health, and social services to identify risk factors and create community-specific action plans to address violence. Further analysis of the data will explore total costs by injury type, costs per injury event, and injury rates by gender and age group. These analyses can help identify high-risk populations and establish priorities for intervention.

One limitation to generalizing our zip code-based surveillance approach is that not all tribes have defined boundaries with corresponding zip codes. Misclassification/ misreporting of race is another limitation. The IHS Office of Program Statistics routinely incorporates adjustments for misclassification/misreporting in their injury data reports.⁶ Tribes whose members frequently utilize tribal and federal medical facilities (IHS, tribal, or VA hospitals, for example) would not receive a complete injury profile were they to solely rely on state hospitalization datasets that exclude federal and tribal facilities from mandatory reporting requirements.⁷

To build on our findings, we recommend that the Fort Mojave and Chemehuevi Tribes submit a joint application for an IHS Tribal Injury Prevention Cooperative Agreement Program (TIPCAP) grant. The data from this project can be used to substantiate need, identify priorities, and evaluate the effectiveness of interventions. Secondly, IHS injury prevention staff should submit injury data requests at least every three years to the agencies identified by this project in Arizona, Nevada, and California. The zip code-specific data can provide the tribes they serve with important insights into their injury issues and trends. Finally, IHS should continue to work with the state of California to include the IHS as a data recipient under the state's Health and Safety code.

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IHS Child Health Notes

Quote of the month

"It's a rather pleasant experience to be alone in a bank at night."

Willie Sutton (noted bank robber)

Articles of Interest

Association of malodorous urine with urinary tract infection in children aged 1 to 36 months. *Pediatrics*. 2012 May;129(5):885-90. Epub 2012 Apr 2.

Objective. To determine whether parental reporting of malodorous urine is associated with urinary tract infection (UTI) in children.

Methods. We conducted a prospective consecutive cohort study in the emergency department of a pediatric hospital. All children aged between 1 and 36 months for whom a urine culture was prescribed for suspected UTI (i.e., unexplained fever, irritability, or vomiting) were assessed for eligibility. A standardized questionnaire was administered to the parents. The primary outcome measure was a UTI.

Results. Three hundred ninety-six children were initially enrolled, but 65 were excluded *a posteriori* either because a urine culture, although prescribed, was not done (11), was collected by bag (39), and/or showed gross contamination (25). Therefore, 331 children were included in the final analysis. Their median age was 12 months (range, 1 - 36). Criteria for UTI were fulfilled in 51 (15%). A malodorous urine was reported by parents in 57% of children with UTI and in 32% of children without UTI. On logistic regression, malodorous urine was associated with UTI (odds ratio 2.83, 95% confidence interval: 1.54 - 5.20). This association remained statistically significant when adjusted for gender and the presence of vesicoureteral reflux (odds ratio 2.73, 95% confidence interval: 1.46 - 5.08).

Conclusions. Parental reporting of malodorous urine increases the probability of UTI among young children being evaluated for suspected UTI. However, this association is not strong enough to definitely rule in or out a diagnosis of UTI.

Editorial Comment

The clinical significance of common childhood symptoms is often unclear. Ear tugging has many parents worried about otitis media, while physicians are confident that studies show no association between the two. Green nasal discharge concerns parents even when doctors reassure them that the color change is a normal progression in colds after several days and not a harbinger of sinusitis. Malodorous urine has long been in this ambiguous category: Is it associated with urinary tract infection or not?

This study shows that bad smelling urine is more common in children with UTI than those without disease. In fact, foul smelling urine was more commonly associated with UTI than vomiting, diarrhea, or dysuria. Unfortunately malodorous urine is not sensitive or specific enough to be used alone to diagnose UTI. For situations in which it is unclear if the risk of UTI is sufficient to order a catheterized urine specimen, asking about urine odor may help with this decision. When in doubt, especially in infants, the best choice is to do the right test and obtain a catheterized urine specimen to rule in, or out, disease.

Save the Date

Fifth International Meeting on Indigenous Child Health, Strong Communities, Healthy Children April 19-21, 2013; Portland, Oregon

Join the Canadian Paediatric Society and the American Academy of Pediatrics, in cooperation with the Indian Health Service and the First Nations Inuit Health Branch, Health Canada, for the Fifth International Meeting on Indigenous Child Health. Child health providers and researchers dedicated to working with American Indian, Alaska Native, First Nations, Inuit, and Métis children and families are encouraged to attend. Participants will have the opportunity to share model programs and research, and develop practical skills that can be utilized in community settings. For updated conference information, visit *www.cps.ca* or *www.aap.org/nach*. To submit abstracts, visit *www.surveymonkey.com/s/DBR9VP8*. Deadline for workshop proposal submission: August 24, 2012; Deadline for abstract submission: September 21, 2012.

Tools for Community Engagement in Injury Prevention

Lawrence Berger, MD, MPH, Clinical Assistant Professor of Pediatrics, University of New Mexico, Albuquerque, New Mexico

There are many ways to define community engagement (CE). Here, CE refers to sincere and skillful efforts to involve community members in the planning, implementation, and evaluation of community-based interventions. CE is important because "interventions are more effective when they are integrated into the community and when approaches are tailored to address unique community characteristics."¹ Community engagement can involve different levels of community involvement, communication flow, impact, and trust.^{2,3} Providing outreach and information to the community is the most basic level of engagement; collaboration (forming partnerships with the community on every aspect of a project) and shared leadership are aspects of more advanced levels.

The importance of CE is reflected in many arenas of public health. Healthy People 2020 has a framework for implementation ("MAP-IT": Mobilize-Assess-Plan-Implement-Track) recommending that states begin by "mobilizing key individuals and organizations into a coalition" and facilitating "community input through meetings, events, or advisory groups."⁴ CE is the cornerstone of community-based participatory research (CBPR).^{5.6} CBPR is an approach used by "public health professionals and community-driven public health that can be relevant and meaningful to the lives of those affected most by health disparities."⁷ A recent literature review⁸ identified areas in which CBPR can have an impact. They include:²

- Engagement changes the choice and focus of projects, how they are initiated, and their potential to obtain funding. New areas for collaboration are identified, and funding that requires community engagement becomes accessible;
- The speed and efficiency of the project can be enhanced by rapidly engaging partners and participants and identifying new sources of information;
- Improvements to study design, tools, interventions, representation/participation, data collection and analysis, communication, and dissemination can be implemented. New interventions or previously unappreciated causal links can be identified through the community's knowledge of local circumstances;

- Improvements can be made in the way research findings are used to bring about change (e.g., through new or improved services, policy or funding changes, or transformation of professional practices), and capacity for change and the maintenance of long-term partnerships can be expanded;
- Engagement creates opportunities to improve the consent process, identify ethical pitfalls, and create processes for resolving ethical problems when they arise;
- The knowledge and skills of the public involved in the project can be enhanced, and their contributions can be recognized. These efforts foster goodwill and help lay the groundwork for subsequent collaborations;
- Community organizations can gain enhanced knowledge, a higher profile in the community, more linkages with other community members and entities, and new organizational capacity.

The Centers for Disease Control and Prevention, the National Institutes of Health, and the Agency for Toxic Substances and Disease Registry (ATSDR) have recently (June 2011) published a 197-page, seven-chapter document entitled, "Principles of Community Engagement."² The document is meant to provide "public health professionals, health care providers, researchers, and community-based leaders and organizations with both a science base and practical guidance for engaging partners in projects that may affect them." It asserts that "Involving the community and collaborating with its members are cornerstones of efforts to improve public health."

What follows are several tools, approaches, and resources for the practical application of community engagement principles for injury prevention and community interventions in general. These approaches include the formation of partnerships, qualitative methods for gaining insights from community members (focus groups and key informant interviews), the use of media, and interpersonal skills.

Forming Partnerships

Coalitions are often the most appropriate model for addressing complicated community problems.⁹⁻¹¹ One definition of a coalition is "a union of people and organizations working to influence outcomes on a specific problem."⁹ Common characteristics of coalitions are longevity (months or years), structure (scheduled meetings, chairperson, agendas, action plan), and decision-making processes (bylaws, quorum, rules of order, consensus or majority vote). Building and maintaining coalitions requires a great deal of time and effort. There are clerical tasks (recording meeting minutes, filing documents), activities surrounding meetings (scheduling, planning, room preparation, facilitation), membership activities (recruitment, orientation, support, appreciation), research and data collection, committee activities and projects, and financial requirements (accounting, budgets, and reports). As one might expect, there are many valuable resources to assist in the formation and work of coalitions, including the Community Toolbox¹², Prevention Institute,¹³ and CADCA (Community Anti-Drug Coalitions of America).¹¹

Coalitions are not the only collaborative model, nor are they always the most appropriate. Other approaches may be more useful when a rapid response is needed, focused expertise is required, few actions are necessary to solve a problem, there is a lack of readiness or will to act, or there is an existing group with the necessary resources, staff, and skills to address the problem. Alternative models for partnership include the lead agency, grass roots movements, and individual champions or advocates. The IHS Office of Environmental Health in the Tucson Area, for example, mobilized political leaders, fire department and EMS staff, and community members in support of their initiative to improve emergency response times (Bowser and Williams in this issue of *The Provider*).

Focus groups

"Focus Groups for Injury Prevention: A Primer" appeared in the July 2011 issue of *The Provider*.¹⁴ Briefly, focus groups are a powerful technique for obtaining in-depth information about the knowledge, beliefs, perceptions, attitudes, and experiences of individuals on specific topics. Unlike committee meetings or presentations to large groups, focus groups involve 8 - 12 participants, a skilled moderator and note-taker, and a carefully-prepared discussion guide. Examples of the use of focus groups for injury prevention include studying parent-child concordance of bicycle helmet use,¹⁵ planning poison prevention education programs,¹⁶ identifying strategies to increase booster seat use,17 and eliciting adolescent mothers' beliefs about parenting and injury prevention.¹⁸ The IHS Injury Prevention Program has used focus groups to learn about barriers to the use of child passenger safety seats, reasons for support or opposition to sobriety checkpoints, safety concerns of residents living in tribal housing units, and attitudes of older adults toward various forms of physical activity.

Key Informant Interviews

As part of a larger-scale initiative to reduce child pedestrian injuries in Baltimore, public health advocates interviewed twenty stakeholders using structured, open-ended, in-person, key informant interviews. Their purpose was to "document local stakeholders' opinions concerning the cause of child pedestrian injuries and effective prevention strategies; identify impediments to implementing environmental interventions to reduce pedestrian injuries; and obtain stakeholders' perspectives about how best to address the identified impediments".¹⁹ Among the insights they gained were the advantage of reframing the injury issue as a "livability" issue to increase public support; the need for improved communication among various agencies; and the value of increasing awareness among both the public and decision-makers of the extent of the problem.

Table 1 presents the three stages in conducting a key informant interview. To promote the full participation of the person being interviewed, begin the interview by introducing yourself, including a brief statement of your job and relevant background. Explain the purpose of the interview and how you will be using the findings. Mostly importantly, clarify the issue of confidentiality. Will you be attributing specific responses or quotations to individuals by name, or only reporting general themes and anonymous findings? Ask if the interviewe has any questions before proceeding with the interview.

Ask non-controversial and factual questions first; save any sensitive or controversial questions until later in the interview, when a sense of safety and trust has been established.

Conclude the interview by asking if the interviewee has anything else they would like to add and if they have any questions of their own. Thank them for their time and willingness to share their expertise and insights.

Use of Media

The CDC's "Vital Signs" is a superb example of the skillful use of media to engage individuals and communities in important public health issues.²⁰ Every month, "CDC Vital Signs" focuses on a single issue, such as seat belt use, alcohol use, food safety, obesity, or teen pregnancy. An issue of the Morbidity and Mortality Weekly Report (MMWR) is published on the topic. There is a professionally-designed fact sheet for consumer audiences with easily-readable graphics and talking points; and a dedicated website that mirrors the fact sheet. The website also provides links to more resources and contact information for feedback and inquiries. The CDC issues a media release with a briefing podcast for the news media and accompanying transcript. Finally, a series of announcements occurs via social media, such as Twitter, Facebook, YouTube, and Flikr.

Few local communities have access to such a broad array of professional media services. However, there are many means for local dissemination of information, including:

- The Internet: web site home page, listserv, Facebook, blogs, Tweets, text messaging, YouTube;
- Newspapers: ads, public notice, Op-Ed column, letter to the editor, news conferences;
- Radio/TV: PSAs, local cable TV, calls to local talk shows;
- Presentations at public meetings;

Table 1: Stages in Conducting Key Informant Interviews

Before the interview:

- 1. Call ahead or send e-mail to schedule an interview.
 - Identify yourself, at least by your name and home town
 - State why you want to have the interview and how long you intend it to be (30 minutes, about an hour, longer?)
 - Try to schedule the interview at a time and location most convenient for the person you'll be interviewing.
- 2. Write a list of questions:
 - Begin by asking simple, safe questions to help you and your subject relax.
 - Save the most difficult questions for the end.
 - Highlight the most important questions, so they don't get lost in the list.
- 3. Call or e-mail a day or two in advance to confirm the time and place.
- 4. Dress respectfully. You don't have to wear dressy clothes for every interview, but avoid the torn jeans and t-shirt look.

At the interview:

- 1. Arrive on time, or a few minutes early.
- 2. Introduce yourself and consider spending a minute in small talk about the weather, your trip over, or whatever.
- 3. Explain the purpose of the interview and how the information will be used.
- 4. Discuss confidentiality. You can say something like this: "Please let me know if there is anything you do not want to be quoted. I appreciate your help and will keep anonymous anything you want to stay anonymous."
- 5. Take notes by hand or with a tape recorder. If you use a recorder, first ask for permission. Also, take notes by hand in case the recorder malfunctions or the battery runs out.
- 6. Be flexible: Ask questions outside of your list as the conversation unfolds.
- 7. Don't rush to fill in periods of silence. Sometimes your subject needs a few minutes to think about his or her answers
- 8. Thank the person and offer to send a summary or report from the project.

After the interview:

- 1. Immediately review your notes to make any corrections or clarifications.
- 2. Send a thank-you note or e-mail.
- Flyers: insert in paycheck envelopes, DMV notices, utility bills, or bank statements;
- Posters and exhibits at community activities and events;
- Leaflets: to hand out at malls, stores, local libraries, etc.;
- Creating a video or DVD;^{21,22}
- Bulletin board notices;
- Training and education programs.

Two media techniques of particular relevance to American Indian and Alaska Native populations are "photovoice" and "digital storytelling." Photovoice (originally called Photo Novella)²³ asks participants to explore community issues by taking still photographs and discussing them as a group. It has been described as "an innovative community engagement technique that uses cameras as documentary tools and employs photographs as catalysts for empowerment and social change^{"24} and as "a community-based participatory action research method designed to uncover the root causes of community problems and to collectively address them."²⁵ In addition to describing the mechanics of taking photographs, photovoice trainers cover issues of "ethics and power; ways of seeing photographs; and a philosophy of giving photographs back to community members as a way of expressing appreciation, respect, or camaraderie."²⁶ Participants select the photos "that most accurately reflect the community's concerns and assets"; tell stories about what the photographs mean; and "identify the issues, themes, or theories that emerge."²⁶

A photovoice project in Tanzania explored the perspectives of youth on the causes of childhood injuries in the urban environment.27 Two videos document the process and the final product of the project. The student participants identified multiple causes of injury including uncovered wells, traffic, hazardous yard trash, and falls from trees. In New Brunswick, Canada, photovoice was used to "bring to the public arena the voices of those who are often most affected by public policy but have little, if any, input into its creation." The images and captions demonstrated that stress, violence and abuse, and poverty were among the serious challenges faced by single mothers.²⁸ Photovoice activities were incorporated into a youth violence prevention curriculum to "provide youth with a voice to identify community strengths, promote critical dialogue, enhance knowledge about issues through youths' perspectives, and inform policy makers."29 "Our Community in Focus" used photovoice to have high school youth address the question, "What contributes to adolescents' decisions to use or not to use alcohol and other drugs?"30

Digital storytelling is founded on the same principles as photovoice and is used in many of the same ways. The process creates "3- to 5-min visual narratives that synthesize images, video, audio recordings of voice and music, and text to create compelling accounts of experience."31 Two important differences are that digital storytelling utilizes video technology rather than still cameras; and group participation in identifying themes, obtaining footage, and creating a storyboard are optional in the creation of digital stories, but essential to photovoice projects. The Alaska Native Tribal Health Center's Injury Prevention Program held a digital storytelling workshop in 2011. The resulting videos are accessible on YouTube, with topics including traumatic brain injury, drowning, child safety, and addictions.³² Workshops on the technique are offered by the Center for Digital Storytelling (www.storycenter.org/) and other groups. The non-profit, technology-support organization, "TechSoup," has many excellent online resources devoted to digital storytelling (www.techsoup.org).

Building Trust and Positive Relationships

Building trust and establishing strong personal

relationships are important to every aspect of community engagement.³³ Professional conduct that promotes trust includes listening attentively, acknowledging others' ideas and statements, providing accurate information, attending meetings and activities consistently and on time, demonstrating a knowledge of the community, soliciting input, sharing credit for accomplishments, and responding to contacts and requests in a timely manner. Relationship-building is fostered by demonstrating a genuine interest in others (e.g., greeting each person at a meeting and learning the correct pronunciation of their names), participating in shared activities (potlucks, festivals, community fund-raising activities), and displaying humility and a sense of humor.

Another powerful approach to building trust and positive relationships is to implement programs in a manner that maximizes benefits to individuals and the community. Can funding be included in a grant proposal to provide employment or training for community members, or to purchase equipment that will remain with a community agency? Can an intervention be designed that will not only prevent injuries, but also address other community concerns, such as cultural preservation, poverty, youth development, or social isolation of older adults?

Further Reading

It is clearly impossible to cover the breadth and depth of community engagement issues in a brief article. Among the many important issues that have not been addressed, for example, are survey techniques to obtain community input, the use of social media to promote community engagement, and issues of cultural competency. Readers who are inspired to learn more can consult several key references in this article.^{2,5,9:13}

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AAIP Receives Grant for Careers in Health for Native Students Program

The Association of American Indian Physicians (AAIP) was recently awarded a \$100,000 matching grant by the Shakopee Mdewakanton Sioux Community to assist American Indian and Alaska Native (AI/AN) students pursuing a health care career.

AAIP's Careers in Health for Native Students program was created to increase the number of tribal members in the health and wellness workforce. AAIP, which is headquartered in Oklahoma City, will establish an educational health care pipeline to assist students navigate their education, training, and career development. "Encouraging Native students to pursue careers as physicians, health care professionals, and biomedical researchers is one of our primary goals, and the gift from the Shakopee Tribe will allow us to continue this critical work," said AAIP Executive Director Margaret Knight.

The tribe's matching donation will be contributed after AAIP raises the initial \$100,000. Shakopee Mdewakanton Sioux Community (MN) Chairman Stanley R. Crooks said, "We hope other tribes and organizations will support this program so that more youth are encouraged to study the science, technology, engineering, and math fields with the ultimate goal of helping tribal youth become the leaders of tomorrow. Our people feel good when they see American Indian physicians and health care workers involved in their communities. We look forward to matching this pledge for \$100,000." AAIP President Dr. Donna Galbreath echoed Chairman Crooks' sentiments on the importance of seeing tribal members in health care roles locally. "Because Native American people suffer from chronic illnesses like diabetes, tuberculosis, pneumonia, and influenza at far higher rates than other racial populations, we need to groom our own citizens to be physicians and prevention specialists," Galbreath said. "Indian people respond better when their health care needs are in the hands of Native physicians and other professionals who understand their culture and value both traditional and Western healing methods."

The American Association of Medical Colleges last year reported the number of AI/AN accepted into medical school has substantially and steadily declined over the past eight years. According to the organization, there were 465 medical school applicants and 202 enrollees in 2004; by 2011 those numbers had declined to 379 and 157 respectively.

As fewer AI/AN physicians have gone into practice over the past decade, the Native population, in contrast, has increased by 26.7 % from 2000 to 2010, according to the US Census. "The cross section of these two trends — fewer doctors and larger populations — is where we are today and why we must address this troubling disparity in our health care systems, and increase the number of Native physicians in Indian Country," Knight said.



MEETINGS OF INTEREST

Advancements in Diabetes Seminars Monthly; WebEx

Join us monthly for a series of one-hour WebEx seminars for health care program professionals who work with patients who have diabetes or are at risk for diabetes. Presented by experts in the field, these seminars will discuss what's new, update your knowledge and skills, and describe practical tools you can use to improve the care for people with diabetes. No registration is necessary. The accredited sponsors are the IHS Clinical Support Center and IHS Nutrition and Dietetics Training Program.

For information on upcoming seminars and/or previous seminars, including the recordings and handouts, click on this link and see Diabetes Seminar Resources: *http://www. diabetes.ihs.gov/index.cfm?module=trainingSeminars*

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*. To see registration information for any of these courses, go to *http://www.ihs.gov/ Cio/RPMS/index.cfm?module=Training&option=index*.

2012 Health Disparities Summit October 31 – November 3, 2012; National Harbor, Maryland

The US Department of Health and Human Services (HHS), under the leadership of the Office of the Assistant Secretary for Health, the National Institute on Minority Health and Health Disparities (NIMHD) at the National Institutes of Health (NIH), and the HHS Office of Minority Health (OMH), invites you to the 2012 Science of Eliminating Health Disparities Summit (also called the 2012 Health Disparities Summit.) The summit will be held on Wednesday, October 31 through Saturday, November 3, 212 at the Gaylord National Resort and Convention Center in National Harbor, Maryland.

The 2012 Science of Eliminating Health Disparities Summit is an HHS-wide endeavor involving a broad spectrum of the federal government that seeks to advance activities to eliminate health disparities. The agenda will build on the momentum of the 2008 Summit and the increased interest of federal agencies to demonstrate their commitment toward improving the health of all Americans. The 2012 Health Disparities Summit represents an ongoing focus on emerging science and its intersection with practice and policy, while maintaining momentum on current national and international trends in addressing the social determinants of health. For more information, go to *http://www.nimhd.nih.gov/summit_site/*.



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 as attachments by e-mail to john.saari@ihs.gov. Please include an e-mail address in the item so that there is a contact for the announcement. If there is more than one position, please combine them into one announcement per location. Submissions will be run for four months and then will be dropped, without notification,, 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 (\$100 for four months). The Indian Health Service assumes no responsibility for the accuracy of the information in such announcements.

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

The Zuni Comprehensive Community Health Center (Zuni-Ramah Service Unit) has openings for full-time primary care physicians starting in fall 2012. 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 17 physicians, two NPs, 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 American Indian 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 in elevation, and is surrounded by beautiful sandstone mesas and canyons with scattered sage, juniper, and pinon pine trees. Many of our medical staff have been with us for several 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*. CVs can be faxed to (505) 782-7405, attn. John Bettler. (7/12)

Medical Director

American Indian Health and Family Services of Southeastern Michigan, Inc. (AIHFS); Detroit, Michigan

AIHFS is looking for a qualified candidate for the medical director position at our health center in Detroit, Michigan. A

summary of the position is as follows: general professional guidance of primary care staff; collaborates with fellow physicians and executive director on administrative operations of the medical, dental, and behavioral health services; responsibilities for management of all aspects of the program including accreditation, infection prevention and control, patient safety risk management, and emergency preparedness. This position will report to the executive director. We are seeking someone with completion of an accredited medical school, internship, and completion of the certification examination by the medical board of examiners; a permanent current full and unrestricted license to practice medicine or osteopathy in Michigan; board certified or eligible in family practice. If board eligible, must be AAFP or AOA certified within six months from the date of hire. Current medication dispensing license (DEA). Experience and training must have been progressive and responsible, demonstrating good knowledge of current principles, practices, methods, and techniques in the field of medicine. Medical experience in an outpatient family medical clinic including pediatrics, obstetrical/gynecological, medical care, and non-emergency care. Possess current and valid Michigan driver's license with no DUI/DWI or reckless driving convictions in the last five years, having no more than two at-fault accidents in the last three years, and maintain a valid driver license during employment. Must pass a criminal background check with a Class I Fingerprint Clearance Card within the initial ninety days of employment. Must have updated immunization record. Must have a tuberculosis test upon employment and employee health profile updated on an annual basis. Must obtain/ maintain CPR certification and a valid card during employment. Please send a cover letter with resume and references to AIHFS, PO Box 810, Dearborn, Michigan 48121, Attn: Jackie Allison, Administrative Assistant. You can also fax to (313) 846-0150. (7/11)

Certified Diabetes Educator Salt River Pima-Maricopa Indian Community; Scottsdale, Arizona

Under general supervision from the Health and Human Services Department (HHS) Health Service Division, Diabetes Services Program Manager, provides diabetes preventive care, screening, clinical care, case management, and education to all children, adults, elders, and families within the Salt River Pima-Maricopa Indian Community. This job class is treated as FLSA Exempt.

To apply for this position or to view the full job description, please visit our website at *http://www.srpmic-nsn.gov/employment/* then select Employment Opportunities. For additional information, contact Keolani Tynan, HR

Recruitment Specialist, Salt River Pima-Maricopa Indian Community at (480) 362-7935. (7/12)

Family Practice Physician Jicarilla Service Unit; Dulce, New Mexico

The Jicarilla Service Unit (JSU) is a new, beautiful, 65,000 square foot facility nestled in the mesas of northern New Mexico with views of the edge of the Colorado Rockies. We provide care to the Jicarilla ("basket-maker") Apache community with a population of 4,000. Our clinic has an opening for a board certified/eligible family practice physician for purely outpatient care with a 40 hour work week. We also have vacancies for a pharmacist and a nurse. Our site qualifies for NHSC, IHS and state loan repayment programs. JSU has a fully functional electronic health record system. Our pharmacy has a robust formulary including TNF-alpha inhibitors and exenatide. The clinic also has an urgent care clinic for acute walk-in cases. We have adopted the IPC model with care teams. Our staff currently consists of four family practice physicians, an internist, an optometrist, and three dentists. We also have a team of dedicated public health nurses who specialize in home visits for elders and prenatal follow-up. The Jicarilla Apache Nation is self-sufficient with profits from oil and natural gas. Much has been invested in the infrastructure of the reservation, including a large fitness facility, a modern supermarket, a Best Western Hotel and Casino, and more.

We are also located 45 minutes from the resort town of Pagosa Springs, which has year-round natural hot springs and winter skiing at renowned Wolf Creek Pass. We welcome you to visit our facility in person. To take a video tour of the Nzh'o Na'ch'idle'ee Health Center online, go to *http://www.usphs.gov/Multimedia/VideoTours/Dulce/default.aspx*. Please call Dr. Cecilia Chao at (575) 759-3291 or (575) 759-7230; or e-mail *cecilia.chao@ihs.gov* if you have any questions. (6/12)

Family Practice Physician (1)

Physician Assistant or Family Nurse Practitioner (2) United Indian Health Services, Inc. (UIHS), Howonquet Clinic; Smith River, California and

Family Practice Physician (1)

UIHS, Potawot Health Village; Arcata, California

UIHS is a premier health care organization located in beautiful northern California along the Pacific coast near the majestic redwoods. The organization is a unique nonprofit made up of a consortium of nine tribes, with a mission "To work together with our clients and community to achieve wellness through health services that reflect the traditional values of our American Indian Community." UIHS provides wraparound services that include medical, dental, behavioral health, and community services. Our focus is to empower our clients to become active participants in their care. If you value outdoor adventures such as backpacking, kayaking, biking, fishing, and surfing, and you envision yourself providing services to an underserved but deserving community in a caring and holistic manner, come join our team. Please visit our website at *www.uihs.org* or contact Trudy Adams for more information at (707) 825-4036 or email *trudy.adams* @crihb.net. (5/12)

Central Scheduler Medical Clinic Manager Human Resources Director Psychiatrist Physician (Internal Medicine or Family Practice) Consolidated Tribal Health Project, Inc.; Calpella, California

Consolidated Tribal Health Project, Inc. is a 501(c)(3) non-profit, ambulatory health clinic that has served rural Mendocino County since 1984. CTHP is governed by a board comprised of delegates from a consortium of nine area tribes, eight of which are federally recognized, and one that is not. Eight of the tribes are Pomo and one is Cahto. The campus is situated on a five-acre parcel owned by the corporation; it is not on tribal land.

CTHP has a Title V Compact, which gives the clinic self governance over our Indian Health Service funding allocation. An application for any of these positions is located at *www.cthp.org*. Send resume and application to Karla Tuttle, HR Generalist, PO Box 387, Calpella, California 95418; fax (707) 485-7837; telephone (707) 485-5115 (ext. 5613). (5/12)

Hospitalist

Gallup Indian Medical Center; Gallup, New Mexico

Gallup Indian Medical Center (GIMC) is currently seeking energetic and collegial internists for our new hospitalist program. The hospitalists care for all adult inpatients previously taken care of by family medicine and internal medicine physicians, and provide consultation services. We have seven FTEs for hospitalists, and while we are still growing, we enjoy further inpatient staffing support from internal medicine and family medicine.

GIMC is a 99-bed hospital in Gallup, New Mexico, on the border of the Navajo Reservation. Clinical specialties at GIMC include internal medicine, family medicine, critical care, cardiology, neurology, orthopedics, ENT, radiology, OB/GYN, general surgery, ophthalmology, pathology, pediatrics, emergency medicine, and anesthesiology. The hospitalists' daily census is approximately 25 - 30. There is a six bed ICU. Our patient population includes Navajos, Zunis, and others living nearby, as well referrals from smaller clinics and hospitals.

Gallup has a diverse community and is very livable,

offering a thriving art scene, excellent outdoor activities (biking, hiking, rock climbing, cross-country skiing), safe neighborhoods, diverse restaurants, national chains and local shops, and multiple public and parochial school options. The medical community is highly collegial, is committed to continuing education, has an on-going collaboration with Brigham and Women's Hospital, and has a high retention rate.

For more information, contact Eileen Barrett, MD, at (505) 722-1577 or e-mail *eileen.barrett@ihs.gov*. Or please consider faxing your CV to (505) 726-8557. (4/12)



Help us Save Money

The federal government is always exploring ways to reduce costs. One recent initiative is an effort to reduce printing expenses. As our readers know, last year we made a transition from an every month print version of *The Provider* to a quarterly print version, thus saving both printing and mailing costs. About 5000 readers still have paper subscriptions.

Although we made this change in the printing schedule, we continued to post the monthly edition of our journal to the CSC website. Currently, about 900 individuals are subscribers to the listserv that notifies them when each monthly issue is posted, and lists the contents of that issue. It is unknown how many readers simply access the website on a periodic basis without relying on the listserv for reminders that the monthly issue is available. It is also unknown how many individuals subscribe to both the print version and the listserv.

As one contribution to the effort to minimize costs, we would suggest to our readers the following: 1) if you have a

paper subscription and are no longer using it, or if you know of someone who has left your facility but is still receiving the paper edition, please contact *Cheryl.Begay@ihs.gov* in our office to let her know that these subscriptions can be stopped; 2) if you have both a paper subscription and access to the online version, and it makes little difference to you which version you use, you may want to consider stopping the paper version and use the one on-line; and 3) if you are using the on-line version and are not on the listserv, you may want to join (go to *http://www.ihs.gov/provider/index.cfm?module=listserv*), as this provides us with more accurate data about readership.

Our goal is to reach as many readers in Indian Country as possible, using the format that is most useful to each individual. Beyond that, we would like to do whatever we can to reduce our expenses.

Please let us know if you have any questions or suggestions.

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