Background

Heart failure is common, expensive, and deadly. In spite of significant advances in the understanding and treatment of heart failure, the statistics remain staggering. Nearly 5.5 million Americans are currently living with heart failure, with 600,000 new cases each year. Nearly 40 billion dollars will be spent annually, representing 1 - 2% of total health care expenditures.1 It is estimated that this cost will triple by the year 2030.2 One out of every five patients diagnosed with heart failure will die within one year; the prognosis is worse than that of many cancers.1

While medications such as angiotensin converting enzyme inhibitors (ACE-I) and certain beta-blockers like carvedilol and extended-release metoprolol have become the cornerstones of therapy and have been shown in numerous clinical trials to reduce mortality, they remain underutilized and/or fail to be titrated to target doses.3 In addition, life-style factors such as reducing salt intake, limiting fluid intake, home monitoring of weight, and adherence to medications make patient education crucial. The ability of the patient to understand the pathophysiology of heart failure, to identify their role in the management of the disease, and to recognize the signs and symptoms of worsening cardiac function are key components to the successful management of these patients and in preventing hospital admissions and readmissions. This fact is illustrated in the core clinical measures for heart failure outlined by The Joint Commission. Of the four core measures for heart failure, two deal directly with patient education (Table 1).4 Evidence suggests that these measures may improve patient outcomes. A retrospective study of 1121 heart failure patients hospitalized at a tertiary care center found that 782 patients were eligible to receive discharge instructions. In all, 68% of patients received all instructions and 6% received no instructions. Patients who received all instructions were significantly less likely to be readmitted for any reason when compared to those who missed at least one type of instruction. However, there was no association found between discharge instructions and mortality.5

In addition to The Joint Commission core measures, the 2010 Heart Failure Society of America (HFSA) clinical practice guidelines for heart failure also stress the importance
Table 1. Joint Commission on Accreditation of Health Care Organizations, United States Standards – heart failure core measures

<table>
<thead>
<tr>
<th>Core Measure</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HF-1 – Discharge Instructions</td>
<td>Patients with heart failure discharged home with written instructions or educational material given to the patient or to the care giver at discharge or during hospital stay, considering all of the following activities: activity level, diet, discharge drugs, follow-up appointment, weight monitoring, and what to do if symptoms worsen.</td>
</tr>
<tr>
<td>HF-2 – Left Ventricle Function (LVF) Assessment</td>
<td>Patients with heart failure with documentation in the hospital record that LVF was assessed before arrival, during hospitalization, or is planned for after discharge.</td>
</tr>
<tr>
<td>HF-3 – Angiotensin Converting Enzyme Inhibitor (ACE-I) for Left Ventricle Systolic Dysfunction (LVSD)</td>
<td>Patients with heart failure with LVSD and without contraindications who are prescribed an ACE-I at hospital discharge. LVSD is defined by an ejection fraction (EF) &lt;40% or narrative description of LVF consistent with moderate to severe dysfunction.</td>
</tr>
<tr>
<td>HF-4 - Adult Smoking Cessation Counseling</td>
<td>Patients with heart failure with a history of smoking cigarettes who are given smoking cessation advice or counseling during the hospital stay. A smoker is defined as anyone who has smoked cigarettes anytime during the year before arrival to hospital.</td>
</tr>
</tbody>
</table>

of patient education. These guidelines recommend that the patient’s literacy, cognitive state, psychological state, culture, and access to social and financial resources be considered when designing educational interventions. In addition, it is recommended that a variety of educational options be provided including video, one-on-one or group sessions, reading materials, etc. The target behaviors that any educational material should strive to elicit in patients with heart failure are listed in Table 2.

The complexity of heart failure education, the focus on achieving demonstrable target behaviors, and the overall impact that it has on patient outcomes, make this aspect of care a formidable hurdle for health care providers in general. However, providers practicing within the Indian Health Service (IHS) may face even greater challenges. In addition to the cultural and socio-economic considerations outlined above, language becomes a barrier to both the adequate conveyance of information, but also in assessing the patient’s comprehension.

Prevalence of Heart Failure among the Navajo

There is a paucity of data in the published literature describing the prevalence of heart failure among the Navajo population. However, if trends in other chronic diseases such as diabetes and hypertension are any indication, the impact of heart failure on this population should not be discounted. The prevalence of hypertension among the Navajo appears to have risen dramatically since the 1930s. A review of over 4000 hospital admissions in the 1930s at an Arizona mission serving the Navajo suggested the prevalence of hypertension to be less than 0.1%. Findings from the Navajo Health and Nutrition survey conducted in 1991 - 1992 found the age-adjusted prevalence of hypertension to be 19%. This same survey found increasing prevalence in other risk factors for coronary heart disease such as overweight, diabetes, abnormal lipid

Table 2. Heart Failure Society of America recommendations for education and counseling

Target Behaviors

- Demonstrate knowledge of the name, dose, and purpose of each medication
- Sort foods into high and low sodium categories
- Demonstrate their preferred method for tracking medication dosing
- Show provider(s) daily weight log
- Reiterate symptoms of worsening heart failure
- Reiterate when to call the provider because of specific symptoms or weight changes
profiles, tobacco use, and inactivity. Given that 70% of patients diagnosed with low ejection fraction heart failure have underlying coronary artery disease, these findings suggest that the prevalence of heart failure among the Navajo may also be increasing.

Northern Navajo Medical Center (NNMC) is a large IHS facility located in Shiprock, New Mexico and is part of the Shiprock Service Unit. NNMC is located in the northeastern portion of the Navajo Nation and serves approximately 50,000 active patients. It is a comprehensive medical center offering both ambulatory care clinics and inpatient hospital services. The Shiprock Service Unit (SSU) is comprised of NNMC, Four Corners Regional Health Care Center, Dzilth-Na-O-Dith-Hle Health Center, Toadlena clinic, Sanostee Clinic, and the Teen Life Center. Using the Resource and Patient Management System (RPMS) search function PGEN, the percentage of patients >20 years old seen in the SSU with any diagnosis of heart failure is 0.9%. This percentage increases with age (Figure 1). These estimates of prevalence should be interpreted with caution and do not represent the entire Navajo population, but rather those patients seen in the SSU within the past year and who have any diagnosis of heart failure populated on the problem list. However, these numbers do demonstrate that heart failure impacts a significant number of patients seen within the SSU, particularly as the population ages.

Table 1: Percentage of SSU Patients with Heart Failure: August 2010 to August 2011

<table>
<thead>
<tr>
<th>Age Range</th>
<th>%</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-39</td>
<td>0.06</td>
<td>0.08</td>
<td></td>
</tr>
<tr>
<td>40-59</td>
<td>0.7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>60-79</td>
<td>0.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>80+</td>
<td>1.9</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Challenges to Heart Failure Management

In addition to the already difficult task of managing heart failure in general, cultural and linguistic differences represent additional challenges that must be addressed in order to effectively manage heart failure in this population. Just as the prevalence of heart failure increases with age, so does the percentage of SSU patients who list Navajo as their preferred language (Figure 2). Again, using the RPMS search function PGEN, over 50% of patients greater than 65 years of age prefer the Navajo language as their primary method of communication. While any language difference can be difficult to address in the clinical setting, the Navajo language presents unique challenges. It is a verbal language, and even those fluent in its speech can rarely read or write it. Anecdotal reports from Navajo pharmacy technicians at NNMC estimate about 1 out of 10 Navajo speakers possesses the ability to read or write the language. Navajo is also very descriptive in nature. This means that there are many English words that lack direct translations into Navajo. For example, the English word airplane is often translated as a car that flies in Navajo. Or Swiss cheese is often described as white cheese with holes. For these reasons, it is not reasonable to have translated questionnaires or other written materials to give directly to patients. The bulk of translation must be done verbally and the translator needs to be able to adequately convey complex medical terms when no direct Navajo translation is available. The same qualities that

Figure 1. Percentage of patients seen with heart failure at SSU Aug 2010–Aug 2011
made the Navajo language an ideal foundation for the complex World War II code of the well-known Navajo Code Talkers severely complicates the communication of health care related information in this population.

Cultural differences between Western health care providers and the Navajo also need to be considered when managing patients with heart failure. When left unaddressed, these cultural differences often lead to conflict, decreased patient satisfaction, and/or sub-optimal outcomes. A study of 34 Navajo informants including patients, traditional healers, and health care providers attempted to identify these cultural differences and outline strategies for overcoming them. One major finding had to do with how to effectively communicate negative information. While Western cultures are more accustomed to the “give it to me straight, doc” mentality, this approach is often not well received in the Navajo culture. Framing the discussion in a primarily negative way can often give the patient the impression that the health care provider is wishing or bringing bad things upon them. A key belief in the traditional Navajo culture is in the power of the spoken word. Just by speaking about something can make it so. For example, saying this medicine is for your heart failure, and you have to take it like this; if you don’t, one of these days you will get worse and maybe even die will often alienate the patient. However, framing the same message in a positive way, such as If you take this medicine and take it in this fashion, you will feel better and live longer; you will feel good is much more in tune with traditional beliefs in the power of language. Along these same lines, it is preferred that when the conveyance of negative information is unavoidable, the health care provider should make reference to a third party rather than directly to the patient. For example, when talking about potential adverse effects of medications, it is preferred to say things like some people might experience this reaction rather than you might have this reaction. Simply by saying you, it can be perceived as a foreshadowing of a negative outcome to the patient that is no longer just by chance, but that the health care provider has wished upon them.

Addressing the Problem

In 2010, a multidisciplinary task force was created at NNMC to examine how best to approach the management of heart failure patients. This team consisted of an internal medicine physician, a clinical pharmacist, a dietitian, and nurses. Evidence suggested that NNMC was underperforming in both the Joint Commission core measures and in adherence to national treatment guidelines. A chart review of 50 heart failure patients conducted in 2006 - 2007 demonstrated that while many patients were receiving ACE-inhibitors and beta-blocker therapy, many were not titrated to target doses (Figures...
Figure 3. Use of Beta-Blockers at NNMC: 2006

![Use of Beta-Blockers at NNMC](image1)

Figure 4. Use of ACE/ARB at NNMC: 2006

![Use of ACE-I/ARBs at NNMC](image2)
Patients admitted for heart failure were not receiving the proper education and/or this education was not getting documented appropriately (Figure 5). One of the first projects the task force undertook was the development of the Heart Smart DVD. The primary goal of this project was to develop a tool to provide an introductory overview of the pathophysiology of heart failure, the role of proper diet and fluid restriction, the role of medications, and key concepts in self-management. The beauty of the video format is that it helped to overcome many of the language and cultural barriers that have been identified in this population. The DVD contains English and Navajo versions. A Navajo interpreter was selected based on his/her experience with health care related education, and the script was written in light of traditional Navajo culture. This approach has many obvious advantages over the ad lib delivery of educational material in this situation. Rather than rely on whoever is available to interpret and hope for a sufficient amount of time, this approach provides a standardized introductory session that the patient can view at their leisure, stopping and restarting, pausing or reviewing as needed. To illustrate the time commitment necessary to cover this material, the English version is roughly 15 minutes long while the Navajo version is closer to 45 minutes in length. The video is not meant to be the end of the process, but rather an introduction that opens the door to further questions and provides an opportunity to elaborate on key concepts. The video is designed to be part of a larger strategy in the comprehensive management of heart failure at NNMC.

In January 2011, a heart failure management clinic was initiated to focus on the delivery of heart failure education, helping patients achieve self-management of the disease, and optimization of drug therapy according to national treatment guidelines. The clinic is co-managed by an internal medicine physician and an advanced practice clinical pharmacist. Dietitians also see the patients on alternating visits. This outpatient clinic is a perfect setting to provide immediate follow-up to patients discharged from the hospital. In this setting, we can verify that the patient was able to see the Heart Smart video. If they were not able to, we give them a copy of the video and discuss it at the next visit. If they have seen the video, we are one step ahead by being able to talk about the video and begin reviewing key concepts and filling in gaps in the patient’s knowledge. While the heart failure management clinic is in its infancy, the process of collecting comprehensive patient outcome data on hospital readmission rates, pre and post levels of patient understanding, and degree of medication optimization is underway. As with any new clinical service, increasing the number of referrals and the percentage of patients that keep their appointments has been a challenge.

In September 2011 a pharmacy residency project was initiated to develop a pharmacy-based, inpatient service to assist with the integration of care of heart failure patients admitted to the hospital into the outpatient heart failure clinic. The goals of this project are to:

1. Assess the patients baseline understanding of key heart failure concepts
2. Improve the delivery of the Heart Smart video to patients prior to discharge
3. Improve the documentation of the four Joint Commission core measures for heart failure
4. Initiate the process of medication optimization prior to discharge
5. Improve the referral and show rates of patients hospitalized for heart failure to the outpatient heart failure clinic

![HF-1: Discharge Instructions](image_url)
Conclusions

A comprehensive, population-based study needs to be conducted to better define the prevalence and impact of heart failure in the Navajo population. Nationally, heart failure is a highly prevalent, costly, and deadly disease. There is reason to believe that this is also true on the Navajo Nation. NorthernNavajo Medical Center has recently begun to address this problem and the unique challenges associated with heart failure management among its patients. The use of a multi-faceted approach targeting inpatient and outpatient management, the use of multiple members of the health care team in a collaborative atmosphere, and the development of culturally and linguistically appropriate tools promise to pay big dividends. It is expected that these efforts will result in improved compliance with the Joint Commission core measures for heart failure, improved adherence to evidence-based guidelines, and therefore the ultimate goal, improved patient outcomes. For readers serving the Navajo people, you may request a copy of the Heart Smart DVD by contacting Kendall Van Tyle, PharmD, at kendall.vantyle@ihs.gov, or William Finn, MD, at william.finn@ihs.gov.

References

15. -Quality Measure Data Report. Prepared by the New Mexico Medical Review Association (NMMRA), under contract with CMS, an agency of the US Department of Health and Human Services. May 2010. 9SOW-NM-PS-10-44.
Scholarships Available

The University of Arizona announces the Graduate Certificate program in Maternal and Child Health (MCH) Epidemiology. Applications for the program are now available. With funds from the Health Resources and Services Administration (HRSA), the Mel and Enid Zuckerman College of Public Health is offering 10 - 15 scholarships to MCH professionals working with American Indian and underserved communities nationally. These scholarships, valued at $11,685 each, will be awarded for the year 2013/14. The University of Arizona’s Graduate Certificate in Maternal and Child Health (MCH) Epidemiology is offered entirely online with no requirements for travel. The deadline to apply for applications to the program is March 1, 2013. All qualified applicants will automatically be considered for scholarship.

For more details about this great opportunity, please visit the program website at http://www.mch-epitraining.arizona.edu/. The application form can be found at http://www.mch-epitraining.arizona.edu/documents/MCH-EPIApplication Form2013_001.pdf.

If you need additional information, please feel free to contact Dr. John Ehiri at jehiri@email.arizona.edu, or Maribel Tobar at matobar@email.arizona.edu.

Our Apologies

We apologize for the delay in the production of this issue. Constraints on funding at the end of the fiscal year made it impossible to complete the preparation of the issue until now. We will catch up with our usual monthly publishing schedule as soon as possible. We are currently accepting submissions for the February issue.
New Eagle Books Toolkit is Now Available

Dozens of free downloadable Eagle Books posters, games, crafts, flyers, event planning tools, family activities, animations, stationery, and other resources can be found in the Eagle Books Toolkit at the CDC’s Native Diabetes Wellness Program site. The toolkit is a free online resource for Eagle Books activity sheets, displays, props, games, how-to instructions, and even more incentives to help educate your community about type 2 diabetes in a fun and entertaining way. Don’t forget, the four original Eagle Books for young children and an Eagle Books adventure novel for middle school youth are completely free for families and for programs serving American Indians and Alaska Natives. Order books at http://wwwn.cdc.gov/pubs/diabetes.aspx.

The Eagle Books

Inspired by the wisdom of traditional ways of health in tribal communities, the four original Eagle Books stories feature a colorful cast of animal characters and young children who explore the benefits of being physically active, eating healthy foods, and seeking the wisdom of elders regarding healthy living. In Coyote and the Turtle’s Dream (2011), and the forthcoming Hummingbird Squash, the children are growing up and finding adventures with their middle school friends. Both sets of books are produced by CDC’s Native Diabetes Wellness Program of the Division of Diabetes Translation in cooperation with the Tribal Leader Diabetes Committee and the IHS to broaden type 2 diabetes awareness and prevention.
You can subscribe to *The Provider* electronically. Any reader can now request that he or she be notified by e-mail when the latest issue of *The Provider* is available on the Internet. To start your electronic subscription, simply go to *The Provider* website (http://www.ihs.gov/Provider). Click on the subscribe link; note that the e-mail address from which you are sending this is the e-mail address to which the electronic notifications will be sent. Do not type anything in the subject or message boxes; simply click on send. You will receive an e-mail from LISTSERV.IHS.GOV; open this message and follow the instruction to click on the link indicated. You will receive a second e-mail from LISTSERV.IHS.GOV confirming you are subscribed to *The Provider* listserv.

**Erratum**

A Figure was inadvertently left out of the article entitled *An old foe revisited: an outbreak of tuberculosis in an American Indian community* (Abraham BK, Tulu Y, Eagle K, Haddad MB, Ndibe P, Chee CP, Bashir A, Redd JT. *IHS Prim Care Provider*. 2012 Sep;37(9):205-207). The figure is reproduced below, and may be saved with the original article. The reference to the figure appears on page 206 under Results. We apologize for this oversight.

**Figure 1. Contact investigation during an outbreak of tuberculosis (n=110)**

![Bar chart showing number of contacts by type with positivity status.](image-url)
The Efficacy of a Pharmacist-Managed Alcohol Abstinence Clinic

LT Valerie Cooper, PharmD, Pharmacy Practice Resident, Warm Springs Health and Wellness Center, Warm Springs, Oregon; now a clinical pharmacist at the Chinle Comprehensive Health Care Facility, Chinle, Arizona; LCDR Jeffrey McCoy, PharmD, Residency Director, Warm Springs Health and Wellness Center, Warm Springs; and CAPT Linda Schrand Crosby, PharmD, BCPS, NCPS, Deputy Chief Pharmacist, Warm Springs Health and Wellness Center, Warm Springs

Introduction

Alcohol consumption is a significant issue throughout the United States. Over 2.4 million Americans have been diagnosed with alcoholism and it is believed that over 19 million require medical treatment. Caucasian and Native Americans are the most likely to consume any type of alcohol, 59.8% and 47.8% respectively, compared to less than 45% for both Asian Americans and African Americans. Native Americans have the highest prevalence of heavy drinking, 12.1% compared to 8.3% in Caucasians, defined as five or more drinks on the same occasion for five or more days in the past 30 days. Alcohol consumption has social consequences such as increased intimate partner violence, rape, and assault, but it also carries risks for health complications such as hypertension, tuberculosis, hepatitis C, and possibly death.

Alcohol use is currently the third leading cause of preventable death in the United States. From 2001 to 2005, there was an average of 1,514 alcohol attributable deaths (AADs) per year among the Native American population. AADs include motor vehicle accidents and alcoholic liver disease but do not include long term disease states due to complications of alcoholism. AADs do not include deaths due to homicide and suicide either. AADs account for 11.7% of all Native American deaths compared to 3.3% among the general US population. The risks for increased morbidity and mortality among Native Americans are also affected by factors such as age and sex. Males are twice as likely to suffer from alcoholism as their female counterparts and approximately 66% of AADs occur in those younger than 50 years old.

Three medications have been approved by the Food and Drug Administration (FDA) for the treatment of alcoholism within the past 55 years. They are disulfiram (Antabuse®), acamprosate (Campral®), and naltrexone (ReVia®, Vivitrol®). Although baclofen (Gablofen®, Lioresal®) does not have an FDA approved indication for alcohol dependence, it has shown some success with alcohol abstinence and is currently being used at the Warm Springs Health and Wellness Center (WSHWC). The available medications are not ideal as they can cause significant adverse reactions, hepatotoxicity, and suicidal ideation. Many patients are not able to remain faithful to the medication regimen and often suffer relapses throughout the treatment course. The best results are achieved when patients are committed to treatment, take medications regularly, and receive ongoing behavioral health support.

Background

In 2005, a medication utilization evaluation (MUE) was performed and looked at six months of data in order to assess documentation and follow up among patients who were seen for alcohol dependence. The MUE revealed that follow up appointments were not made and many patients did not return for medication refills. In 2007, a pharmacy-run clinic, Positive Pathways, was developed in order to increase accessibility to pharmacological aids and enhance communication between the WSHWC and the Community Counseling Center (CCC) in order to improve alcohol abstinence outcomes.

Patients eighteen years and older who present to the pharmacy-run clinic are screened using the CAGE questionnaire, with two or more positive answers indicating alcohol dependence. Patients are required to attend regularly scheduled alcohol addiction counseling, along with Positive Pathways, was developed in order to increase accessibility to pharmacological aids and enhance communication between the WSHWC and the Community Counseling Center (CCC) in order to improve alcohol abstinence outcomes.

At the initial visit, patients complete the Penn Alcohol Craving Scale (PAC Scale) and thereafter at every two-week visit throughout treatment. The PAC Scale objectively measures patient alcohol cravings and is used to assess the effectiveness of pharmacological treatment. Each patient also completes the anxiety screening quiz to determine if a patient has a level of anxiety that may need to be treated. The clinic screens for anxiety as it may be related to a patient’s ability to stop using alcohol. If present, the patient is referred to their designated provider (DP). A Hamilton Anxiety Rating Scale (HAM-A) is completed at the initial visit and at each follow up.

November 2012  THE IHS PROVIDER 239
visit to assess the initial level of anxiety and any improvements throughout treatment. Along with performing various assessments, the pharmacist is responsible for ordering and interpreting pertinent laboratory data prior to beginning pharmacological therapy and throughout the treatment process, along with checking blood pressure, pulse, and other vital signs as needed.6

Currently through the clinic, patients have the option to receive baclofen, disulfiram, or naltrexone as pharmacological treatment, along with a vitamin pack that includes a multivitamin, thiamin (B1), and folic acid. Medications are filled for a two-week supply and patients must return every two weeks for refills and follow up. At follow up appointments, the pharmacist assesses the efficacy of the treatment, along with making any decisions to change therapy due to efficacy and safety concerns.

Since its development in 2007, the clinic has greatly improved alcohol abstinence rates at the WSHWC, but there is still room for improvement. The medications currently available are not ideal due to their possible adverse reactions, frequency of dosing, and drug interactions. Some medications also require the patient to be alcohol or opioid free prior to starting and cannot be taken if the patient consumes alcohol or opiates, which can cause a decrease in compliance and higher drop-out rates. These issues demonstrate the need for safer and more effective therapies for treating alcoholism.

Topiramate has been studied for its use in substance related disorders such as alcoholism, nicotine dependence, and opioid abuse, and has shown moderate benefit.8,9,10 It is believed that topiramate is able to decrease alcohol’s reinforcing effects through facilitation of gamma-aminobutyric acid (GABA) function and inhibition of glutaminergic pathways in the corticomesolimbic system. Unlike some available medications, topiramate is eliminated through renal excretion (avoiding hepatotoxicity), can be dosed once daily, and can be initiated while the patient is still consuming alcohol.10

Studies are available that look at the use of topiramate in the treatment of alcohol dependence. Several of these studies were the basis of this study and are listed below in Table 1.

**Objective**

The study objective was to assess the efficacy of topiramate compared to the current pharmacological options used in treating alcohol dependence at the WSHWC’s alcohol abstinence clinic, Positive Pathways. Outcome objectives included average number of drinks per week, average number of drinking days per week, PAC scale scores, HAM-A scale scores, percentage of patients reaching abstinence (defined as patients who have quit drinking for at least three months), and number of sober days per patient.

**Methods**

This was a prospective, observational, open-label study that was conducted through the pharmacy run Positive Pathways Clinic at the WSHWC. The Positive Pathways clinic has been in existence at the WSHWC since 2007 and recently added topiramate as an alternative treatment option in November 2011.

Patients were included in the study if they were 18 years of age or older, assessed to have alcohol dependence by the CAGE questionnaire, self-referred or referred by the CCC or DP, were willing to participate in the clinic, signed the study

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### Table 1. Studies of Topomirate in Alcohol Dependence

<table>
<thead>
<tr>
<th>Study</th>
<th>Design</th>
<th>Sample</th>
<th>Dose &amp; Duration</th>
<th>Primary outcome measure</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Johnson, et al 2007</td>
<td>RCT, double blind</td>
<td>n=183 topiramate; n=188 placebo</td>
<td>300mg/d x 14 weeks</td>
<td>Percentage of heavy drinking days</td>
<td>Mean difference 8.44% (p=0.002)</td>
</tr>
<tr>
<td>De Sousa, et al 2008</td>
<td>Randomized, open-label</td>
<td>n=50 topiramate; n=50 disulfiram</td>
<td>Topiramate 50mg TID vs disulfiram 250mg/d x 9 months</td>
<td>Relapse rates and time to relapse</td>
<td>10% relapse rate for disulfiram versus 44% for topiramate; 79 days until relapse in topiramate versus 133 days in disulfiram</td>
</tr>
<tr>
<td>Florez et al, 2008</td>
<td>Randomized, open-label</td>
<td>n=51 topiramate; n=51 naltrexone</td>
<td>Topiramate 200-400mg/day vs naltrexone 50mg daily x 6 months</td>
<td>Alcohol intake and cravings</td>
<td>No differences in abstinence rates or cravings</td>
</tr>
</tbody>
</table>
enrolled multiple times, demonstrating that achieving alcohol abstinence is not an easy goal. The majority of the patients were female (63%). The average age at enrollment was 38 years old, and reported duration of drinking was an average of 23 years per patient. Tobacco use was high among this patient population as 66% of patients reported using some type of tobacco. Forty-four percent of the patients also reported current illicit drug use, and 73% reported using some type of illicit drug during their life.

Out of the 70 patients who have enrolled in the clinic, only 51 patients have had at least two clinic visits. Sixteen of the patients have enrolled multiple times, making a total of 76 unique enrollments to be used for data analysis. Patients participated in the clinic for an average of eight weeks (range: 2 - 32 weeks) and had an average of four clinic visits (range: 2 - 20 visits). On average, patients were able to achieve at least eight weeks of sobriety (range: 0 - 44 weeks) and at least 23% of enrollments were able to achieve alcohol abstinence (defined as patients who have quit drinking for at least 12 weeks). See Table 2.

### Data Collection

All data were obtained by a trained pharmacist at each patient visit and recorded in an alcohol abstinence clinic chart note in the electronic health record (EHR) using a standardized template, which was currently in use at the WSHWC. All data were stored in the EHR system as pharmacists entered patient chart notes at each visit. Data were extracted from the patient chart notes and put into a spreadsheet for data analysis.

Data were collected from participants at the initial visit and at each follow-up visit. Data included the CAGE questionnaire score at enrollment, the anxiety screening quiz score at baseline, the PAC scale and HAM-A at baseline and at follow-up visits, along with any data that were documented in the pharmacists’ notes that included, but were not limited to the following: medication compliance rates, number of days alcohol was consumed per week and quantity, or days of alcohol sobriety since last appointment. Demographic information collected included patient sex, age at enrollment, age of drinking onset, tobacco and drug use history, number of previous quit attempts, and referral type. Attendance at Alcoholics Anonymous (AA) meetings was also recorded.

### Data Analysis

Data were evaluated using descriptive statistics due to the short duration of this study period (approximately five months) and limited number of participants. In order to be included in data analysis, patients who were started on topiramate had to be enrolled for at least two weeks which allowed the patients to have been enrolled in the clinic and have at least one follow-up appointment.

### Results

Clinic outcomes. Since its development in 2007, 70 patients have enrolled in the Positive Pathways clinic at the WSHWC. Out of the 70 patients, 30 patients (44%) have enrolled multiple times, demonstrating that achieving alcohol abstinence is not an easy goal. The majority of the patients were female (63%). The average age at enrollment was 38 years old, and reported duration of drinking was an average of 23 years per patient. Tobacco use was high among this patient population as 66% of patients reported using some type of tobacco. Forty-four percent of the patients also reported current illicit drug use, and 73% reported using some type of illicit drug during their life.

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### Table 2. Length of Sobriety

<table>
<thead>
<tr>
<th>Outcome objectives</th>
<th># of enrollments (n = 76)</th>
<th>% of enrollments</th>
</tr>
</thead>
<tbody>
<tr>
<td>≥ 1 relapse</td>
<td>23</td>
<td>30.3%</td>
</tr>
<tr>
<td>Never achieved sobriety</td>
<td>6</td>
<td>7.9%</td>
</tr>
<tr>
<td>&lt; 4 weeks of sobriety</td>
<td>25</td>
<td>32.9%</td>
</tr>
<tr>
<td>4-11 weeks of sobriety</td>
<td>27</td>
<td>35.5%</td>
</tr>
<tr>
<td>≥ 12 weeks of sobriety (abstinence)</td>
<td>18</td>
<td>23.7%</td>
</tr>
</tbody>
</table>

At the initial visit, the average patient reported drinking at least four days per week and consumed an average of 47 drinks per week. All patients who have participated in the clinic have been able to decrease the amount of alcohol they consume by at least 90%. The mode starting CAGE score was four out of four and the median initial PAC scale score was 14 out of 30. Alcohol cravings were reduced by half as indicated by the PAC scale score decreasing by an average of 57% by the final visit. Although all patients were assessed with the CAGE questionnaire and the PAC scale, only seven patients were assessed with the anxiety screening quiz and HAM-A scale. On average, the seven patients displayed mild anxiety as defined by the anxiety screening quiz and six of the seven patients were assessed to have no or mild anxiety as defined by the HAM-A scale (median score of 13). See Table 3.

Although four medications were available to help treat alcohol dependence, the majority of patients used baclofen. Medication use is displayed in Figure 1.
Table 3. Patient Assessments

<table>
<thead>
<tr>
<th>Outcome objectives</th>
<th>Initial</th>
<th>Final</th>
<th>% Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td># of drinking days/week</td>
<td>4.32 (mean)</td>
<td>0.37 (mean)</td>
<td>91.4%</td>
</tr>
<tr>
<td># of drinks/week</td>
<td>47 (mean)</td>
<td>2.24 (mean)</td>
<td>95.2%</td>
</tr>
<tr>
<td>PAC-scale score</td>
<td>14 (median)</td>
<td>6 (median)</td>
<td>57%</td>
</tr>
<tr>
<td>HAM-A scale score</td>
<td>13 (median)</td>
<td>5 (median)</td>
<td>61.5%</td>
</tr>
</tbody>
</table>

Figure 1. Medication Use

Although more patients chose to use baclofen to help reduce cravings, the rates of alcohol abstinence achieved were comparable to disulfiram and topiramate. Baclofen and disulfiram also showed success in helping patients to achieve at least four to eleven weeks of sobriety, 32.3% and 46.7% respectively. Naltrexone was able to help patients achieve sobriety for a short time but no patients were able to achieve alcohol abstinence as defined for the study (≥ 12 weeks). See Table 4.

Regardless of medication choice, all four medications have been able to decrease the amount of alcohol consumed by patients by at least 90%; however, many of the patients were not enrolled long enough to have reached sobriety for four to eleven weeks or alcohol abstinence (Table 3). CAGE questionnaire scores and the initial PAC scale scores were not different among the four medications, but disulfiram lowered the PAC scale score by a much larger percentage compared to the other medications (Table 5).

Alcohol addiction counseling was a mandatory component to participate in the Positive Pathways clinic; patients also had the option to attend additional counseling and therapy sessions. Sixteen patients have participated in Alcoholics Anonymous (AA) in addition to individual addiction counseling. Of these patients, six were able to achieve sobriety for at least four weeks and eight have been able to achieve alcohol abstinence. Forty-four percent of all patients reaching alcohol abstinence in the Positive Pathways clinic have participated in AA meetings. Only three of the 16 patients who attended AA meetings have enrolled in the Positive Pathways clinic multiple times. Two were able to show some success during their first enrollment and both were able to achieve alcohol abstinence during their second enrollment.

Sixteen patients have enrolled in the Positive Pathways clinic multiple times. Overall, nine patients showed an improvement in length of sobriety during successive enrollments. Five patients were unable to achieve alcohol abstinence during their first enrollment but were later able to achieve this goal when re-enrolling. Five patients demonstrated a decreased period of sobriety during successive enrollments and two patients showed no change in success rates.

Topiramate use. Since the addition of topiramate to the clinic in November 2011, 13 patients have enrolled in the clinic. Six of these patients were started on topiramate but only one patient met the inclusion criteria. Because only one patient could be used in the data analysis of topiramate use, a case study on this patient’s outcomes was performed.

A 23-year-old Native American female presented with alcohol dependence. She showed some success in a previous quit attempt as she was enrolled in the clinic for eight weeks and maintained sobriety while using baclofen. However, at this

Table 4. Medication Use and Sobriety

<table>
<thead>
<tr>
<th>Outcome objectives</th>
<th>Baclofen (n=52)</th>
<th>Naltrexone (n=6)</th>
<th>Disulfiram (n=15)</th>
<th>Topiramate (n=3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-11 weeks sobriety</td>
<td>17 (32.3%)</td>
<td>3 (50%)</td>
<td>7 (46.7%)</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>≥ 12 weeks sobriety</td>
<td>13 (25%)</td>
<td>0 (0%)</td>
<td>4 (26.7%)</td>
<td>1 (33.3%)</td>
</tr>
<tr>
<td>Weeks of enrollment</td>
<td>(mean) 8.9</td>
<td>4.7</td>
<td>8.2</td>
<td>7.6</td>
</tr>
<tr>
<td>Weeks of enrollment</td>
<td>(range) 2-32</td>
<td>2-9</td>
<td>2-25</td>
<td>2-19</td>
</tr>
</tbody>
</table>
Table 5. Medication Use and Assessment Scores

<table>
<thead>
<tr>
<th>Medication</th>
<th>CAGE Score (mode)</th>
<th>PAC-Scale Score Initial (median)</th>
<th>PAC-Scale Score Final (median)</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baclofen</td>
<td>4</td>
<td>14</td>
<td>7</td>
<td>50%</td>
</tr>
<tr>
<td>Naltrexone</td>
<td>4</td>
<td>18</td>
<td>6</td>
<td>66.7%</td>
</tr>
<tr>
<td>Disulfiram</td>
<td>4</td>
<td>16</td>
<td>4</td>
<td>75%</td>
</tr>
<tr>
<td>Topiramate</td>
<td>4</td>
<td>12</td>
<td>8</td>
<td>33.4%</td>
</tr>
</tbody>
</table>

time, she reported drinking seven days a week and consumed an average of 70 to 90 drinks per week. The patient was started on topiramate 25mg once daily and was titrated to 300mg once daily over eight weeks. The patient was able to achieve abstinence as she maintained sobriety for over 24 weeks and reported zero relapses. Her PAC scale score decreased from six to zero and the HAM-A scale score also decreased from 16 to zero as well.

Along with achieving abstinence, the patient experienced other benefits. By week eight, the patient noted that she had stopped the use of tobacco for at least two weeks. Tobacco cessation was not an original goal for the patient and the decrease in tobacco use was reportedly unintentional. By the time of data collection, the patient had remained tobacco free for 18 weeks.

While using topiramate, the patient reported no adverse drug events. From baseline to week 24, it was noted that the patient lost seven pounds. The patient had 100% compliance with clinic visits and reported 100% medication use.

Discussion

Since the addition of topiramate in November 2011, a small number of patients enrolled in the Positive Pathways clinic, which limited the number of patients that were available to be started on topiramate. Out of the six patients who started topiramate, three were lost to follow up prior to having the minimum visits. This number of drop-outs is not uncommon for the clinic and it reflects the difficulty that patients experience when trying to achieve abstinence. Two of the patients who chose to start topiramate were enrolled for only two weeks at the time of data analysis and were unable to be included in the study. Having only one patient included in the study significantly limited the amount of data that could be used to evaluate the efficacy of topiramate in treating alcohol dependence.

The one patient included in topiramate data analysis was able to achieve alcohol abstinence while enrolled in the clinic. The patient demonstrated great success, as she was able to achieve alcohol abstinence and maintain sobriety for at least 24 weeks. Along with these benefits, the patient also achieved tobacco cessation for at least 18 weeks and reported benefits in her social and family life. However, the patient’s success cannot be entirely attributed to topiramate use. The patient was motivated and showed previous success in the alcohol abstinence clinic as she was able to achieve eight weeks of abstinence while using baclofen.

Due to the patient’s success at achieving tobacco cessation, topiramate could also be considered and evaluated for its use in treating other substance disorders. The patient originally had no desire to achieve the goal of tobacco cessation but by week six of topiramate use, she was no longer purchasing tobacco products. The decrease in tobacco cravings could also be due to a change in behavior as the patient was no longer drinking and was not associating with the same friends.

The study also evaluated the success rates of patients who have enrolled multiple times in the clinic and of those who have participated in AA meetings. There is no significant difference in patient outcomes based on the number of quit attempts or enrollments into the clinic. However, participating in AA meetings has been shown to improve alcohol abstinence outcomes. The success rates demonstrated cannot be attributed to one factor alone. Patients who attend AA meetings may be highly motivated to quit from the start and therefore would show higher success rates. Participating in AA may help the patient to stay motivated by offering advice and support through increased contact with others in recovery. It could also be the combined benefits of medications, addiction counseling, and AA meetings.

Conclusion

Seventy patients have enrolled in the Alcohol Abstinence Clinic at the WSHWC since 2007 and at least 18 patients have been able to achieve alcohol abstinence. The pharmacy managed alcohol abstinence clinic has shown many positive outcomes for this patient population through the years and will continue to be an effective strategy for assisting patients to overcome alcohol addiction.

At this time, the efficacy of topiramate cannot be compared to baclofen or the other medications currently available to treat alcohol dependence because of limited data. Because some success has been demonstrated with topiramate, its use will be continued at the WSHWC for alcohol dependence, and patient outcomes will continue to be monitored.
References


Print Version of The Provider to Cease Publication

The federal government is always exploring ways to reduce costs. One recent initiative is an effort to reduce printing expenses. After the distribution of the next two quarterly print issues for the third and fourth quarters of 2012, we will stop printing and mailing out paper copies.

We will continue to publish the monthly electronic 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.

We encourage all our readers to subscribe to the listserv (go to http://www.ihs.gov/provider/index.cfm?module=listserv) so that you will receive monthly reminders about when the latest issue is posted to the website. This will also give us an improved count of the number of readers.
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.

Clinical Director (Primary Care)
Family Medicine Physician
White Earth Health Center; Ogema, Minnesota

White Earth Health Center is located in northwestern central Minnesota on the White Earth Reservation, which is in the heart of lake country. The reservation is 36 by 36 square miles; its largest metropolitan location is approximately 75 miles from Fargo, North Dakota or 235 miles from the Twin Cities. We have a satellite clinic in Naytahwaush (approximately 30 minutes from the WE Service unit) operating on Monday, Tuesday, and Friday, and one in Pine Point (approximately 30 minutes from the WE service unit) that is open on Thursday. The satellite clinics have one full time family practice physician and one family practice nurse practitioner who staff them on a regular basis.

We are a Federal Indian Health Service outpatient/ambulatory care facility that had 115,699 ambulatory visits for 19,494 registered patients this past year. We offer services Monday through Friday 8:00 am to 4:30 pm; on all federal holidays we are closed. Our services include a dental department with three full time dentists; a mental health department that consists of one psychologist, four counselors, one contract psychiatrist and one mental health nurse practitioner; and an optometry department comprised of the chief of optometry, one optometry technician/receptionist, and one contract optometrist.

Our medical staff consists of three full time family practice physicians, one contract family practice physician, one podiatrist, one internal medicine physician, one audiologist, a nutritionist, one pediatrician and three family nurse practitioners. We have pediatric and same day/urgent care clinics. The clinics are operating/implementing the IPC model.

We offer competitive salary, excellent benefits (health, life, retirement) and both sick and vacation leave. For further information, please contact Mr. Tony Buckanaga, Health Professions Recruiter at (218) 444-0486, or e-mail tony.buckanaga@ihs.gov. (11/12)

Central Scheduler
Medical Clinic Manager
Psychiatrist
Physician (Family Practice/OB-GYN)
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). (11/12)

WIC Coordinator
SEARHC; Sitka, Alaska

The WIC Coordinator/RD works as a member of the SEARHC health promotion team to assess for, plan, implement, administer, and evaluate nutrition and health education programming that responds to Goals 8 and 9 in SEARHC s Strategic Plan. The WIC Coordinator also works to ensure high quality WIC services are provided to eligible women, infants, and children throughout southeast Alaska. Additionally, the WIC Coordinator partners with organizations working with the WIC population to make appropriate referrals and to enhance the WIC program.

Baseline Qualification Requirements include a BS in community nutrition/dietetics or a nutrition-related field, and four years of clinical nutrition and/or community nutrition work experience with specific progressive experiences in maternal/child nutrition, outpatient medical nutrition therapy, and program planning and administration. Must be both a registered dietitian and licensed dietitian/licensed nutritionist in the State of Alaska. Must adhere to the American Dietetic Association code of ethics and complete 75 continuing education credits every five years as required by registration and licensure plus keep current on registration and licensing payments. Other/Preferred Qualifications include a valid
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 4,400. Our clinic has an opening for a board certified/eligible family practice physician for purely outpatient care with a 40 hour work-week. Our site qualifies for 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. Our staff currently consists of an internist, three family practice physicians, 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 revenues from oil and natural gas. Much has been invested in the infrastructure of the reservation, including a large fitness facility, a modern supermarket, a hotel and casino, and more. We are also located 5 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. (10/12)

Clinical Nurse
Gallup Indian Medical Center; Gallup, New Mexico

Gallup Indian Medical Center (GIMC) is currently accepting applications from experienced nurses for positions within our hospital facility. We are particularly interested in nurses with experience in the Labor and Delivery, Emergency Room, and Ambulatory Care settings.

GIMC is a 78-bed hospital in Gallup, New Mexico, on the border of the Navajo Reservation. Our patient population includes Navajos, Zunis, and others. Gallup provides outdoor activities (biking, hiking, rock climbing, and running, to name a few). As a Navajo Area Indian Health Service Hospital, we provide clinical specialties that include Internal Medicine, Cardiology, Anesthesia, Psychiatry, Emergency Medicine, OB/GYN, General Surgery, Orthopedics, Ophthalmology, ENT, Radiology, Pathology, and Pediatrics.

Nurse employment benefits include competitive salary, comprehensive health insurance, double time pay for holidays worked, night and Sunday pay differential, no census days, and continuing education. Government housing is not available, as we are not located on the Navajo Reservation. Opportunities are available for growth and advancement depending on your personal nursing career goals. We welcome your questions, curiosity, and application submission.

For more information on how and where to apply, contact Myra Cousens, RN, BSN, Nurse Recruiter at (505) 726-8549, or e-mail myra.cousens@ihs.gov. (10/12)

Pediatrician
Blackfeet Community Hospital; Browning, Montana

This hospital-based government practice is seeking a BC/BE pediatrician to work with another pediatrician and a pediatric nurse practitioner. Practice true primary care pediatrics with inpatient, outpatient, and newborn hospital care. Attractive call and rounding schedule. Competitive salary with federal government benefits. The area provides a wide variety of outdoor recreational activities, being only 12 miles from Glacier National Park. For more information, please contact Dr. Tom Herr at thomas.herr@ihs.gov or call (406) 338-6372. (9/12)

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 (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)

Hospitalist
Gallup Indian Medical Center; Gallup, New Mexico

Gallup Indian Medical Center (GIMC) is currently seeking energetic and collegial

November 2012   THE IHS PROVIDER 247
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)
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