Medical Charges for Car Crash Victims With and Without Seat Belts: Implications for Tribal Health Programs


Introduction

For American Indians and Alaska Natives (AI/AN) nationally, injuries are the number one reason for hospitalization in contract care facilities and second only to heart disease as a cause of death. Motor vehicle crashes account for 56% of the injury deaths in the AI/AN population. In 1994 in the State of Oklahoma where there is a large Native American presence, there were over 48,000 motor vehicle injuries and 695 fatalities. Only 22% of fatality victims were wearing seat belts.

As tribes increasingly assume operation of their own health care programs, epidemiologic and economic data are vitally important for decision-making. Given the enormous burden of motor vehicle injuries on any medical system, does investment in seat belt and child restraint programs make sense, or would prevention dollars be better spent on improving hospital services or emergency care? Are changes needed in Oklahoma’s secondary seat belt law or is the law functioning well to protect the state’s residents, including Native Americans? Our study examined the charges for medical care for American Indian patients injured in motor vehicle crashes at one IHS hospital in northeastern Oklahoma, to obtain data that might be useful in addressing these questions.

Methods

Located in Tahlequah, Oklahoma, the W.W. Hastings Hospital is an Indian Health Service (IHS) facility serving members of federally-recognized tribes. The hospital has 60 beds and is a Level III Trauma Center. It is adjacent to the Tahlequah City Hospital and is about 25 miles from the next closest hospital in Oklahoma. Medical records were abstracted for all car occupant crash victims who were treated in the emergency room at the W.W. Hastings Hospital from January 1 through September 30, 1994. Information was obtained on the restraint status of the patient, whether the person was admitted, length of hospital stay if admitted, position in the vehicle, age, sex, method of payment, and details concerning circumstances of injury. Only data concerning initial treatments were recorded; follow-up visits and deaths were not included. Also not included were victims injured as pedestrians, motorcyclists, bicyclists, occupants of truck beds, or riders in recreational vehicles.

In This Issue...

33 Medical Charges for Car Crash Victims With and Without Seat Belts: Implications for Tribal Health
37 Preventing Baby Bottle Tooth Decay and Early Childhood Caries Among American Indian and Alaska Native Infants and Children
40 Letter to the Editor: Anticoagulation Clinic
40 Meetings of Interest
41 Native American Medical Literature
47 Continuing Education Materials Available
vehicles. Data were analyzed using Epi-Info Version 6.

To estimate the charges for emergency room treatment and hospitalization, we contacted the Blue Cross and Blue Shield Insurance Company of Tulsa. In 1994, the average daily charge for hospitalization in Oklahoma was $800, and the average charge for an emergency room visit was $350 (personal communication, Rick Kelly, Senior Consultant). These charge data were used to estimate costs, or resource expenditures, potentially generated by these auto crashes. We calculated estimated charges as follows:

For patients treated in the emergency room (ER) and released:
Number of ER patients x $350.

For patients who were hospitalized:
(Number of hospitalized patients x $800 x ALOS) + ER charges.

ALOS is the average length of stay calculated for those hospitalized, where length of stay was known. In four instances, where the length of hospital stay was not available (all of whom did not wear seat belts, and were transferred to outside hospitals), the average length of stay was assumed to be the same as for unrestrained patients admitted to the W.W. Hastings Hospital. We believe this is a conservative estimate because transferred patients likely suffered more serious injuries.

Results
A total of 262 patients were treated for motor vehicle-related injuries in this nine-month period. Table 1 shows the restraint status and medical treatment received by motor vehicle crash patients. Of the 262 victims, restraint status at the time of injury was recorded for 216 (82%). Among these 216 victims with known restraint status, 80 (37%) were restrained at the time of their crash and 136 (63%) were not restrained. The demographic characteristics of the restrained and unrestrained groups (total N=216) were remarkably similar: 58% and 59% were female, 64% and 60% were drivers of the vehicles, 81% and 83% had no medical insurance (private, Medicaid, or Medicare), respectively. The mean age of the unrestrained group (24.4 years), however, was somewhat lower than that for the group wearing seat belts (27.4 years) at the time of injury. Nevertheless, there is no reason to believe that this age difference would have any impact on the analysis of charges.

Of the 80 patients who were restrained, two (3%) were admitted to the hospital: one patient for 2 days, and the other for 10 days. This resulted in a calculated average length of stay (ALOS) of 6 days for the two restrained patients who were hospitalized (Table 1). All other restrained victims were treated and released from the emergency room. Of the 136 victims who had not been wearing seat belts, 19 (14%) were hospitalized. The length of stay was not reported for four of these patients, all of whom had been transferred to a contract care hospital. Length of stay was reported for the other 15 patients, and ranged from one to 64 days. The total number of documented patient days in the hospital was 275, resulting in an ALOS of 18.3 days for these 15 patients for whom data were available. Of the 46 patients whose restraint status was unknown, none were admitted to the hospital.

The distribution of restraint status by age group is shown in Table 2. Occupants over the age of 15 years accounted for 225 (86%) of the 262 victims. Among victims with known restraint status, 41% (13/32) of occupants under 16 years of age were restrained and 36% (67/184) of occupants 16 years and older were restrained.

Table 1. Disposition of car crash victims by occupant restraint status, W.W. Hastings Hospital, Oklahoma, January 1 through September 30, 1994.

<table>
<thead>
<tr>
<th>Restraint Status</th>
<th>Total</th>
<th>Treated In ER Only</th>
<th>Admitted</th>
<th>Average Length of Stay</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restrained</td>
<td>80</td>
<td>78 (97.5%)</td>
<td>2 (2.5%)</td>
<td>6.0 days</td>
</tr>
<tr>
<td>Not restrained</td>
<td>136</td>
<td>117 (86.0%)</td>
<td>19 (14.0%)</td>
<td>18.3 days*</td>
</tr>
<tr>
<td>Unknown</td>
<td>46</td>
<td>46 (100.0%)</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Total 262 241 21

* Average length of stay (ALOS) for the 15 patients whose length of stay was recorded.

Table 2. Number of victims by age group and occupant restraint status, W.W. Hastings Hospital, Oklahoma, January 1 through September 30, 1994.

<table>
<thead>
<tr>
<th>Age Group (Years)</th>
<th>Restrained</th>
<th>Not Restrained</th>
<th>Restraint Status Unknown</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5</td>
<td>7</td>
<td>9</td>
<td>2</td>
<td>18</td>
</tr>
<tr>
<td>6-15</td>
<td>6</td>
<td>10</td>
<td>3</td>
<td>19</td>
</tr>
<tr>
<td>16-44</td>
<td>56</td>
<td>109</td>
<td>35</td>
<td>200</td>
</tr>
<tr>
<td>45+</td>
<td>11</td>
<td>8</td>
<td>6</td>
<td>25</td>
</tr>
<tr>
<td>TOTAL</td>
<td>80</td>
<td>136</td>
<td>46</td>
<td>262</td>
</tr>
</tbody>
</table>
For the nine-month period of the study, the total estimated charges (inpatient and emergency services) calculated for restrained patients were $37,600, compared to $325,760 for unrestrained patients, making the total charges for unrestrained patients almost 9 times higher than those for restrained patients. The average charge for each restrained patient ($37,600/80) was $470 compared to $2,395 per unrestrained patient ($325,760/136); the average cost for each unrestrained patient was, therefore, five times greater than for those restrained.

The charges for patients whose restraint status was unknown were $16,100, with the average charge per patient of $350 (the estimated charge for the emergency room visit).

The total hospitalization charges for restrained patients who were hospitalized were $9,600, with an average charge per patient (n=2) of $4,800. For unrestrained patients who were hospitalized, the total hospitalization charges were $278,160, with an average charge per patient (n=19) of $14,640. Thus, for those hospitalized, the average hospitalization charge per patient for an unrestrained victim was three times greater than for a patient who had been wearing a seat belt prior to injury, while the total hospital charges were 29 times greater for unrestrained victims than for restrained victims.

When the data for all 262 patients are annualized (that is, calculated for a 12-month period of time), the total estimated annual charges for treatment of injuries as a result of car crashes would be $506,000. This amount represents the calculated charges for the 262 emergency room visits and 348 days of patient hospitalization extrapolated to a 12-month period. Figure 1 shows the dramatic differences in medical care charges.

**Discussion and Conclusions**

A conservative estimate of the annual charges for emergency room care and hospitalization for injured motor vehicle occupants at this one IHS hospital amounts to $506,000. This is clearly a substantial underestimate, since only emergency room and initial hospitalization costs were included. Not obtained were subsequent ambulatory and inpatient charges, actual charges for the four unrestrained patients treated in contract care facilities, and estimates of indirect costs. Table 3 lists many of the variables that would need to be calculated for a thorough accounting of direct and indirect costs of injury. Nationally, direct medical costs account for only 25% of the lifetime costs for people injured by motor vehicles. Indirect costs include the loss of earnings due to disability and premature death, and economic losses associated with family members who have to care for injury victims.

Among the 216 patients with known restraint status, patients who were unrestrained by seat belts at the time of injury accounted for 63% of the victims treated at the Hastings Hospital but 90% of the total medical charges. Most of this difference was accounted for by higher rates of admission (14% vs. 3%) and longer hospital stays (18.3 days vs. 6 days) for unrestrained compared to restrained victims. In fact, if all 117 unrestrained patients had been wearing seat belts at the time of their injury, the total number of days of hospitalization would have been reduced by 94%. These figures presumably reflect the much greater severity of injuries among unrestrained crash victims.

Although the reliability of restraint status as documented in medical records is uncertain, we would expect any bias to be in the direction of overreporting restraint use at the time of injury. For both legal and psychological reasons, victims would be more likely to state that they were using a seat belt when they actually had been unrestrained than the other way around. Overreporting restraint use would have the effect of reducing the overall charges attributed to unrestrained victims and increasing those in the restrained category, making our estimates even more conservative. Similarly, attributing the same average length of stay to the four victims transferred to other hospitals whose length of stay was unknown is a conservative approach, since these patients are likely to have been among the most severely injured. The estimate we used for emergency room charges is similar to a recently published report from Michigan. Also, the figure of $800 per hospital day is very close to recently released IHS reimbursement rates ($736 per day nationally, except $930 for Alaska).

There are several direct implications of these data for American Indian and Alaska Native communities. As seen in Table 2, rates of occupant restraint use were woefully inadequate...
Table 3. Direct and indirect costs of injury.

<table>
<thead>
<tr>
<th>Cost Category</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-hospital care: ambulance</td>
<td>ambulance and helicopter services</td>
</tr>
<tr>
<td>Emergency room visits</td>
<td></td>
</tr>
<tr>
<td>Hospital treatment: initial care</td>
<td>initial care, rehospitalizations,</td>
</tr>
<tr>
<td></td>
<td>inpatient rehabilitation</td>
</tr>
<tr>
<td>Nursing home care</td>
<td></td>
</tr>
<tr>
<td>Outpatient physician visits</td>
<td></td>
</tr>
<tr>
<td>Outpatient prescription drugs</td>
<td></td>
</tr>
<tr>
<td>Physical therapy</td>
<td></td>
</tr>
<tr>
<td>Wheelchairs and appliances</td>
<td></td>
</tr>
<tr>
<td>Attendant care</td>
<td></td>
</tr>
<tr>
<td>Home modifications</td>
<td></td>
</tr>
<tr>
<td>Vocational rehabilitation</td>
<td></td>
</tr>
<tr>
<td>Value of earnings lost</td>
<td></td>
</tr>
<tr>
<td>Value of goods and services not</td>
<td>produced because of injury-related illness, disability, and death</td>
</tr>
</tbody>
</table>

quate among victims of all ages. Therefore, increasing the rates of seat belt and child restraint usage has the potential for dramatically reducing serious injuries and resultant medical costs. This can be facilitated through enhanced car seat loaner programs; educational interventions in schools, worksites, and through the media; and passage and rigorous enforcement of primary restraint laws.10-13 Oklahoma’s child seat law is subject to primary enforcement; however, the state’s seat belt law is currently “secondary.”

Because 86% of the victims seen at the W.W. Hastings Hospital were over the age of 15 years, child restraint programs alone will not dramatically decrease the overall number of motor vehicle-related injuries. Reducing the incidence of motor vehicle crashes through efforts to reduce drunk driving, enforce speed limits, and promote safer driving among juveniles (for example, through restricted licensing) will decrease injuries among the most vulnerable groups of motor vehicle occupants. The latter includes teenagers, young adults, and individuals who are intoxicated.14-17

The effectiveness of a comprehensive prevention program has been demonstrated by the Navajo Nation. The Navajo Nation enacted a primary enforcement safety-belt use law, implemented an intensive public information program, and initiated rigorous, widespread enforcement of the law. Motor vehicle-related injury hospitalization rates for Navajo Indians fell nearly 30% as seat belt use increased from 14% to 60% over three years.18 In spite of the success demonstrated by the Navajo Nation, most tribes do not have a primary enforcement occupant restraint law. Tribes, as sovereign nations, can adopt strict motor vehicle codes affecting occupant restraints, speed limits, and drunk driving. Injury prevention programs become more urgent as health care dollars become more scarce.

Acknowledgements
The authors are grateful to Alicia Guess, Wanda Logan, and the medical records staff at W.W. Hastings Hospital; Roger Gollub, for reviewing the original manuscript; and Harold Cully and Dione Bartmess of the IHS Injury Prevention Program at the Oklahoma City Area Office for technical support and guidance. We also appreciate the many helpful suggestions provided by two anonymous reviewers. Data collection for this study was performed while Ms. Phipps was enrolled in the IHS Injury Prevention Fellowship Program. Support for Dr. Berger was provided by the IHS and the Robert Wood Johnson Foundation.

References
Preventing Baby Bottle Tooth Decay and Early Childhood Caries Among AI/AN Infants and Children

Bonnie Bruerd, DrPH, Health Policy Consultant, Salem, Oregon; Candace Jones, RDH, MPH, Director, IHS Dental Disease Prevention Program, Albuquerque, New Mexico; and Dave Krise, DDS, MS, Periodontist, IHS National Pediatric Consultant, Phoenix Indian Medical Center, Phoenix, Arizona.

Introduction

Initial dental decay in infants and young children is the result of a specific bacterium, Streptococcus mutans, which is transmitted from mothers to their infants. This organism is “fueled” by the frequent intake of sucrose and other refined carbohydrates. Baby bottle tooth decay (BBTD) is characterized by a unique pattern of dental decay that affects the upper primary incisors followed by the primary molars, in order of eruption. This pattern of dental decay is seen in children 1 to 3 years of age. BBTD can result from one or both of the following behaviors: giving a child a bottle containing carbohydrates at nap or bedtime, and bottle-feeding past the age of 12 months. Breastfed children who sleep with their mother and nurse at will throughout the night have also been reported to have this same pattern of decay.

Some young children develop dental decay unrelated to bottle-feeding or breast-feeding. This dental decay affects the primary molar teeth and is generally caused by frequent snacking on refined sugars or other factors. The broader term early childhood caries (ECC) is used to describe dental decay in preschool age children from any source, and includes BBTD. The terminology “BBTD/ECC” has been adopted to alleviate confusion for professional and lay people alike as caries in this population are multifactorial and cannot be attributed to a single risk factor. Unfortunately, the children with BBTD/ECC are at risk of developing further dental decay because they have increased colonization with Streptococcus mutans.

Dental decay in young children can cause pain and infection, and may result in tooth extractions and costly dental treatment. According to a 1991 IHS survey of dental patients, over 75% of American Indian and Alaska Native (AI/AN) children experienced dental decay in their primary teeth. Other surveys have documented that approximately 50% of AI/AN children participating in Head Start programs, ages 3 to 5 years, have the specific pattern of BBTD. IHS estimates the cost to treat BBTD, based on children treated under contract by pediatric dentists, to be $1000-$2000 per child. If hospitalization is necessary, the cost may be doubled. The IHS estimates that if all children were to receive the dental care they needed by the time they reach age seven, over $61.7 million would be needed to pay for treatment (an amount that is many times larger than the budget for the entire IHS dental program). In order to treat only the new cases occurring each year, some $4.9 million would need to be added to the current annual budget.

Due to the high prevalence of dental caries among AI/AN children and the associated costs of treatment, the authors believe that our efforts need to focus on prevention. This paper describes both community-based and clinic-based interventions to prevent BBTD/ECC.

Community-Based Interventions

During the period 1986-1990, a BBTD prevention program was implemented in 12 AI/AN communities. This program was a cooperative effort of three Department of Health and Human Service agencies: the Administration for Children, Youth, and Families, Head Start Bureau; the Indian Health Service, Dental Program; and the Centers for Disease Control and Prevention, Division of Oral Health. Preliminary data from the 12 combined sites has demonstrated that the prevalence of BBTD in children attending Head Start programs fell from 57% in 1986 to 43% in 1990, a 25% reduction (p<.001). Funding for the BBTD intervention ended in 1990. The individual sites were encouraged to continue their efforts, but the provision of centralized training and technical assistance ceased.

In 1995, the IHS Dental Program, in conjunction with Head Start, funded an evaluation to assess the current prevalence of BBTD and the level of program activity at these 12 original sites. The prevalence of BBTD at the 12 sites combined remained at 43%. The variation between sites, however, was considerable. After eight years, the program...
effect at the five sites that continued the full intervention was a reduction in prevalence to 38% (p<.001). At the seven sites that discontinued the community-based prevention activities, the net effect after 8 years was a 13% reduction in prevalence (not statistically significant, p>.05). The primary reason given for discontinuation of the community-based prevention activities at these sites was staff turnover. The evaluation concluded that the BBTD program is effective, but it must be institutionalized for long-term success.

The BBTD prevention program is multidisciplinary and incorporates a variety of strategies. The two major components are one-to-one counseling of the caretakers of infants and a community-wide intervention. The one-to-one intervention continued in some fashion at each of the 12 sites. The Women, Infants, and Children Program (WIC) staff reported that they offered BBTD counseling at the intervals recommended by national WIC guidelines. This includes the use of a tippee cup for juice at six months of age, and weaning from the bottle at 12 months. Breastfeeding is encouraged as the preferred method of feeding. At the sites where BBTD prevalence continued to decrease, the dental staff continued its prevention efforts and worked closely with the medical staff to encourage routine BBTD counseling during well-baby and immunization clinic visits.

At the successful sites, staff reported involvement in a wide variety of community-based prevention activities. These activities included computerized mailings to caretakers of infants, smile contests, health fair booths, public service announcements, use of posters, news articles, and parenting workshops. One dental assistant coordinator reported, "I like seeing the difference. It’s really fun. I talk to people (about BBTD) at the supermarket and everywhere else in the community."

The BBTD prevention program demonstrated reduction in the prevalence of BBTD at both three-year and eight-year evaluations. A dentist from a successful site put it succinctly, "It works, but it takes a long-term commitment to the community."

The BBTD program has recently been expanded to include messages that address frequent snacking, the use of fluorides, early identification of dental decay by caregivers, and dental screenings at one year of age.

Clinic-Based Interventions

As our understanding of the process of dental decay increases, there is speculation that we will soon be able to screen for and diagnose a child’s risk for dental decay and then apply pharmacotherapeutic interventions selectively to those infants and children at greatest risk for the disease. Various pharmacotherapeutics are already available.

Clinic-based interventions to prevent BBTD/ECC have been field-tested in a few IHS dental clinics. One of these interventions involved the monthly application of iodine on the teeth of infants and young children. The primary obstacle to this intervention was a high dropout rate. A pharmacotherapeutic regimen that requires monthly treatments may not be practical in an IHS setting (or many other settings). Since there are no data currently available to assess long-term effectiveness, the application of topical iodine is not recommended in an IHS setting.

Topical fluoride varnishes may be a more viable pharmacotherapeutic intervention at IHS sites. Fluoride varnishes have been used extensively in many European countries since the 1960s. These varnishes are both safe and effective for use in young children and they require less frequent applications than the iodine treatment. Applied two to four times yearly, fluoride varnishes have a beneficial effect in the prevention of cavities in infants and preschool children. Fluoride varnishes are currently marketed as a cavity liner, but no FDA regulations prevent its use as a topical fluoride, the original intent of its development. Use of this product in this manner is up to the clinician’s judgment.

Another strategy is to encourage parents and caretakers to bring the child to the dental clinic for an oral examination by the age of 12-18 months. Appropriate education can be provided and, if there are small lesions, preventive regimens may be applied that will arrest the lesion and potentially avoid an unpleasant dental experience for the child and caretaker.

As a secondary preventive measure, small lesions in young children can be provisionally restored with the new class of glass ionomer restorative products. Atraumatic Restorative Treatment (ART) involves removing decalcified tooth tissue using only hand instruments and restoring the cavity with an adhesive glass ionomer filling material. The glass ionomer restoration provides a fluoride release that slows the advancement of the carious lesion. Larger lesions, especially on the maxillary incisors, can be treated without using a stainless steel crown. This restoration serves as an interim filling. In many cases, it is possible to delay the need for definitive care until the child is older when he or she may not require restraint, sedation, or general anesthesia.

The IHS ABCD (Access for Baby and Children’s Dentistry) Program has been designed to combine community- and clinic-based programs into a comprehensive effort to include wider professional involvement. This program uses many components of the original BBTD community-based intervention project. In addition, clinical components of the ABCD Program include risk assessment, early intervention and referral, pharmacologic and restorative protocols, education of parents, and preventive recall. This intervention is patterned after a similar program at the University of...
Washington, but has been modified to better address AI/AN needs.

The ABCD program was introduced to IHS personnel in July 1996 in collaboration with the Department of Pediatric Dentistry at the University of Washington in July, 1996. The combination of both clinical and community preventive efforts is advocated to provide secondary prevention and help prevent advancing caries requiring sedation and general anesthesia.

Conclusions

The success of the community-based BBTD prevention program was demonstrated by both 3- and 8-year evaluations. Clinical interventions that address early identification of dental caries and the application of pharmacotherapeutic agents should continue to be evaluated in selected IHS communities. The combination of community-based and clinical interventions has been provided to 11 demonstration sites and will be evaluated in the future.

Since there is a new cohort of parents and infants each year, long-term success will be dependent on the institutionalization of these interventions. Centralized training of dental and medical staff; Women, Infant and Children workers; and other community members, along with on-going technical assistance, will be critical to the long-term success of these interventions. Prevention and early intervention are considered by the authors to be the only viable and affordable options to effectively address the massive problem of early childhood caries in AI/AN children.

References

LETTER TO THE EDITOR

The article, "Crow Agency Anticoagulation Service Initiated by Pharmacists," by Daniel Struckman, RPh, published in the August 1995 issue of The IHS Primary Care Provider was a great service to the pharmacy staff here in Warm Springs, Oregon. This has long been an area of patient care that appeals to me. After offering to provide this service at other service units and being repeatedly turned down for one reason or another, I had given up and did not even think to offer the service to the providers at the Warm Springs Health and Wellness Center.

One of our providers read the article and brought it to a Pharmacy and Therapeutics Committee meeting to ask why the pharmacists here didn’t provide this service. That is all it took to get the ball rolling! We contacted Mr. Struckman in Lame Deer, Montana. He sent us a copy of their protocol and pointed us in the right direction to obtain training materials for the pharmacy staff.

After reading the recommended literature and reviewing his program, we were able to set up a similar program that fit the needs of our clinic and devise a training program to standardize the care our patients would receive. Although our anticoagulation clinic program is very small, it adds a tremendous amount of professional satisfaction to our jobs and has lead to talk of other pharmacy-run clinics. We would all like to thank Mr. Struckman for taking the time to publish the success he has had with his anticoagulation program.

Linda M. Schrand, PharmD  Darcy Brownlee, RPh
Clinical Pharmacist  Chief Pharmacist
Steven Wintersteen, RPh  Kevin English, RPh
Deputy Chief Pharmacist  Clinical Pharmacist
Warm Springs Health and Wellness Center
Warm Springs, Oregon

MEETINGS OF INTEREST

Advanced Operative Laparoscopy for Obstetricians and Gynecologists
June 2-3, 1997  (and repeated)  Bethesda, MD
This two-day course in advanced gynecologic laparoscopy is designed to enhance the specialist’s experience and skills in the laparoscopic management of gynecologic problems. Included are seven hours of didactic instruction. The remainder of the time is devoted to two hands-on laboratory sessions in small groups to provide individualized experience and practice in performing laparoscopic surgery with the latest available equipment on the market and under development. Procedures to be performed include salpingostomy, salpingectomy, oophorectomy, and hysterectomy, as well as management of potential inoperative problems. USUHS designates this activity for 13 credit hours in Category 1 of the Physician’s Recognition Award of the American Medical Association.

The course will be presented June 2-3, 1997; September 22-23, 1997; and December 8-9, 1997 at the Uniformed Services University of the Health Sciences in Bethesda, MD. For additional information, contact HM1 Michael D. Lozeau, USN, Department of Obstetrics and Gynecology, USUHS at 301-295-3777.

Obstetrical Ultrasound
June 11-13, 1997  Bethesda, MD
This Three-day OB/GYN imaging diagnostic ultrasound course is specifically aimed at physicians in practice, first- and second-year OB/GYN residents, certified nurse midwives, and nurse practitioners who wish to learn and improve their "basic" skills of performing and interpreting basic anatomic ultrasound examinations. Anyone who has been performing real-time ultrasound procedures for less than 24 months should benefit from participation. The course includes three half-days of didactic presentation and discussion sessions and three half-days of supervised hands-on practical sessions in small groups. This permits the participants to perfect their skills and put into practice the measurements and calculations discussed in the didactic portion of the course. USUHS designates this course for 23 credit hours in Category 1 of the Physician’s Recognition Award of the American Medical Association and for 27.6 contact hours of continuing education in nursing by the American Nurses Credentialing Center’s Commission on Accreditation.

For additional information, contact LT Tim Osbon, Continuing Health professional Education, USUHS at 301-295-3106.

Recruitment Conference for IHS and Tribal Recruiters
July 8-10, 1997  Phoenix, AZ
Recruitment and retention of health care professionals are major concerns for Indian health programs across the country, whether they are operated directly by the Indian Health Service, by tribes, or by urban Indian programs. It is essential that we work together to maximize our exposure to prospective
employees and enhance the probability of having them join us in our efforts.

As a means of beginning a dialogue that will result in the development of a comprehensive and cooperative recruitment effort, we are convening a meeting of as many of the people involved in the effort to recruit health professionals for Indian health programs as possible.

More information and an agenda will be available by the end of April. Please mark your calendars now, and plan to attend this important activity.

NATIVE AMERICAN MEDICAL LITERATURE

The following is an updated MEDLINE search on Native American medical literature. This computer search is published regularly as a service to our readers, so that you can be aware of what is being published about the health and health care of American Indians and Alaska Natives.

The Clinical Support Center cannot furnish the articles listed in this section of The Provider. For those of you who may wish to obtain a copy of a specific article, this can be facilitated by giving the librarian nearest you the unique identifying number (UI number, found at the end of each cited article).

If your facility lacks a library or librarian, try calling your nearest university library, the nearest state medical association, or the National Library of Medicine (1-800-272-4787) to obtain information on how to access journal literature within your region. Bear in mind that most local library networks function on the basis of reciprocity and, if you do not have a library at your facility, you may be charged for services provided.


March 1997 □ THE IHS PROVIDER 41


 Davis SM, Lambert LC, Cunningham-Sabo L, Skipper BJ. Tobacco use: baseline results from pathways to health, a school-based project for southwestern American Indian youth. *Prev Med.* 1995 Sep;24(5):454-60. 96089872


 Borins M. Native healing traditions must be protected and preserved for future generations. *Can Med Assoc J.* 1995 Nov 1;153(9):1356-7. 96067025


Lowe M, Kerridge IH, Mitchell KR. 'These sorts of people don't do very well': race and allocation of health care resources. *J Med Ethics.* 1995 Dec;21(6):356-60. 96235755


Merriwether DA, Hall WW, Vahine A, Ferrell RE. mtDNA variation indicates Mongolia may have been the source for the founding population for the New World. Am J Hum Genet. 1996 Jul;59(1):204-12. 96256866


Walkinshaw M, Strickland L, Hamilton H, Denning K, Gayley T. DNA profiling in two Alaskan Native populations...
using HLA-DQA1, PM, and D1S80 loci. *J Forensic Sci.* 1996 May;41(3):478-84. 96236234


Woodruff L. Growing diversity in the aging population. *Caring.* 1995 Dec;14(12):4,7-8,10. AHA/96142888


Santos FR, Rodriguez-Delfin L, Pena SD, Moore J, Weiss KM. North and South Amerindians may have the same major founder Y chromosome haplotype. [letter] *Am I Hum Genet.* 1996 Jun;58(6):1369-70. 96213772


Stephenson J. For some American Indians, casino profits are a March 1997 □ THE IHS PROVIDER 45
good bet for improving health care. [news] JAMA. 1996 Jun
19;275(23):1783-5. 96251141

Voelker R. Physicians find their place in Zuniland. [news] JAMA.
1996 Jun 19;275(23):1781-2.96251140

National Institute of Diabetes and Digestive and Kidney Diseases. The
and Human Services, Public Health Service, National Institute of Health,
1995. NIH publication NIH 95-3821. 9611081

Burhanstipanov L, Dresser C. Documentation of the Cancer
Research Needs of American Indians and Alaska Natives. Bethesda, MD:
U.S. Department of Health and Human Services, Public Health Service,
National Institutes of Health, National

Cancer Institute; 1994. 9609157

O’Nell TD. Disciplined Hearts: History, Identity, and Depression
in an American Indian Community. Berkley, CA: University of

Waldram JB, Herring DA, Young TK. Aboriginal Health in
Canada; Historical, Cultural, and Epidemiological Perspectives.
Toronto: University of Toronto Press; 1995. ISBN 0-8020-5956-2(cloth:

Successful Strategies for Increasing Direct Health Care Quality,
Accessibility, and Economy for American Indians and Alaska
Natives. Rockville, MD: U.S. Department of Health and Human
Services, Public Health Service, Indian Health Service; 1995. IHS
publication 95-85016.

NCME VIDEOTAPES AVAILABLE □

Health care professionals employed by Indian health
programs may borrow videotapes produced by the Network for
Continuing Medical Education (NCME) by contacting the IHS
Clinical Support Center, 1616 East Indian School Road, Suite
375, Phoenix, Arizona 85016.

These tapes offer Category 1 or Category 2 credit towards
the AMA Physician’s Recognition Award. These CME credits
can be earned by viewing the tape(s) and submitting the appro­
priate documentation directly to the NCME.

To increase awareness of this service, new tapes are listed
in The IHS Provider on a regular basis.

NCME #703
Psychiatric Challenges for the Primary Care
Physician: Obsessive Compulsive Disorder (60 minutes)
Although one of the hallmarks of obsessive compulsive
disorder is secrecy, a noted authority in the management of this
disorder, Dr. John H. Greist, shows how asking three key
questions can help you detect the vast majority of patients with
this anxiety disorder. Using a case review approach, Dr. Greist
illustrates the principles of diagnosis and optimal treatment,
incorporating data from recent studies of current therapeutic
modalities. As he demonstrates, many patients can be appro­
priately managed in the primary care setting by specific med­
ications and behavioral interventions. Dr. Greist also provides
guidelines for psychiatric referral.

NCME #704
Psychiatric Challenges for the Primary Care
Physician: Depression (60 minutes) Patients with major
depressive disorder initially seek help from their primary care
physicians. In this era of managed care, those in primary care
must treat these patients efficiently and aggressively. Effective
screening and recognition are key to early diagnosis, while
first-line therapeutic agents may provide successful treatment
outcomes. Using a clinical case review approach, Dr. Robert
M.A. Hirschfeld offers a practical approach to managing depression in today’s primary care practice.

NCME #705
Clinical Strategies for Successful Aging: Health
Promotion in Older Patients (60 minutes) As baby­
boomers approach the golden years, their expectations
regarding robust health and increased longevity are high.
What steps should middle-aged and older patients be taking
now to promote continued good health in the next decade of
their lives? In this first segment of a two-part series on
aging, a distinguished panel of geriatricians and internists
addresses general lifestyle measures and specific preventive
interventions that can help your patients age successfully.

NCME #706
Clinical Strategies for Successful Aging: Management of Geriatric Syndromes (60 minutes)
Despite the best efforts at health promotion, aging takes an
inevitable toll, leaving older patients vulnerable to
increasing illness and progressive disability. Nevertheless,
much can be done to ameliorate the consequences of the
most common geriatric syndromes. In this second segment
of a two-part series on aging, a distinguished panel of geri­
atricians and internists discuss specific strategies to
decrease morbidity and mortality in elderly patients.

NCME #707
Legal and Ethical Dilemmas of Current Clinical
Practice Part 1: The Impact of Economic Pressures (60
minutes) In an era of dwindling health care resources,
practicing physicians must grapple with a spate of new legal
and ethical issues. How can physicians work most effec­tively
in the current practice environment? Is it possible to
fulfill ethical duties to patients while meeting the demands
of payers to contain costs? And how can the risk of legal
liability be minimized? In this first of a two-part series, a
distinguished panel representing the fields of law, ethics,
and clinical practice examines these timely issues and
provides guidelines for resolving important ethical and legal
dilemmas in day-to-day practice.
CONTINUING EDUCATION MATERIALS AVAILABLE

The IHS Clinical Support Center has continuing education materials available, at no charge, for health care professionals employed by Indian health programs. To make it easier for you to request these materials, we will describe what is available and provide an order form several times a year in The Provider.

Individual Format
Most of our "Home Study Modules" are designed for use by physicians, nurses, nurse practitioners, and physician assistants (two are for nurses only). To obtain continuing education credits, an individual must read the materials in the module, take and pass the post-test, and complete the evaluation form. It is expected that each of these learning activities will take participants approximately 2-5 hours to complete. Current topics are listed on the order form (below).

Group Format
Eleven risk management modules, a nurse leadership development course, and modules about clinical evaluation of child physical and sexual abuse (described in more detail below) are designed to be used in a group format. These group format activities, requiring someone on the staff to identify him/herself as the coordinator and discussion leader, include background material for the coordinator, goals and objectives, and ideas to promote active participation of the group. To obtain continuing education credits, the coordinator/discussion leader, after following the format provided, must submit the attendance list and completed evaluations to the Clinical Support Center.

Each of the Risk Management modules includes four unique case histories involving tort claims against the Indian Health Service, as well as background information for the designated discussion leader, and suggested questions to encourage active dialogue about the issues presented. Each module stands on its own; use of all modules is not required to obtain credit. IHS- and tribal-employed physicians, physician assistants, nurse practitioners, and nurses can earn continuing education (CE) credit using these modules.

The Nurse Leadership Development course is designed to be offered over several months’ time. Each of the 16 modules in this continuing education activity includes a lesson plan, objectives, background information for the discussion leader, a suggested bibliography that participants may read to enable them to be actively involved in the learning process, evaluation forms, and more. The purpose of this course is to enhance the leadership and management skills of registered nurses. To ensure the success of this activity, it is important to have the Director of Nurses’ and nursing supervisors’ commitment. In addition, the nursing staff needs to be involved in the needs assessment and initial planning so that they feel this is something they want to be actively involved with. CE credit for this activity is available for nurses only.

The modules on child physical and sexual abuse include slides and an audiotape. Continuing education credit is available for physicians, physician assistants, and nurses

CE Accreditation
These activities have been planned and produced in accordance with the criteria established by the Accreditation Council for Continuing Medical Education (ACCME) and the American Nurses Credentialing Center Commission on Accreditation (ANCCCA). The Indian Health Service Clinical Support Center is the accredited sponsor.

How to Obtain Materials
Health care professionals employed by Indian health programs may request these continuing education materials by completing the coupon below and sending it to the IHS Clinical Support Center, 1616 East Indian School Road, Suite 375, Phoenix, Arizona 85016 (fax: 602-640-2138).

---

Request for Continuing Education Materials
When ordering materials, please check no more than three items per order.

**Individual Format** (home study modules)
- Tuberculosis
- Sexually Transmitted Diseases
- Hypertension
- Headaches
- Asthma
- Early HIV Infection
- Urinary Incontinence
- Otitis Media
- Management of Cancer Pain
- Incorporating Critical Thinking Into Nursing Practice
- Improving Case Management Using Critical Care Pathways

**Group Discussion Format** (Risk Management modules)
- Negligence
- Informed Consent
- Golden Rules of Risk Management
- Tort Claims
- Documentation: The Defensible Medical Record
- Reducing the Incidence of Medication Errors
- Medical Malpractice
- Credentials and Clinical Privileging
- Federal Government Liability for Contract Providers
- Issues Involving Contract Health Services
- Informed Consent Revisited

**Group Discussion Format** (other)
- Nurse Leadership Development
- Evaluation of Child Physical Abuse
- Evaluation of Child Sexual Abuse

Please PRINT legibly.

Name ____________________________ Profession ____________________________
Work Address ____________________________ Phone (Day) ____________________________
Worksite:  □ HS  □ Tribal  □ Urban Indian  Service Unit ____________________________

Please specify ____________________________

March 1997 □ THE IHS PROVIDER 47
THE IHS PRIMARY CARE PROVIDER

The Provider is published monthly by the Indian Health Service Clinical Support Center (CSC). Telephone: 602-640-2140; fax: 602-640-2138; e-mail: provider@smtp.ihs.gov; timely meeting notices and "Information for Authors" available via fax retrieval service: 602-640-2140. Previous issues of The Provider (beginning with the December 1994 issue) can be found on the CSC Internet home page (http://www.csc.ihs.gov).

Wesley J. Picciotti, MPA Director, CSC

Wilma L. Morgan, MSN, FNP
E.Y. Hooper, MD, MPH
John F. Saari, MD Editors

Thomas J. Ambrose, RPh
Stephan L. Foster, PharmD
M. Kitty Rogers, MS, RN-C Contributing Editors

Opinions expressed in articles are those of the authors and do not necessarily reflect those of the Indian Health Service or the Editors.

Circulation: The Provider (ISSN 1063-4398) is distributed to more than 6,000 health care providers working for the IHS and tribal health programs, to medical schools throughout the country, and to health professionals working with or interested in American Indian and Alaska Native health care. If you would like to receive a copy, send your name, address, professional title, and place of employment to the address listed below.

Publication of articles: Manuscripts, comments, and letters to the editor are welcome. Items submitted for publication should be no longer than 3000 words in length, typed, double-spaced, and conform to manuscript standards. PC-compatible word processor files are preferred. Manuscripts may be received via the IHS Banyan electronic mail system or the Internet.

Authors should submit one hard copy with each electronic copy. References should be included. All manuscripts are subject to editorial and peer review. Responsibility for obtaining permission from appropriate tribal authorities and Area Publications Committees to publish manuscripts rests with the author. For those who would like more information, a packet entitled "Information for Authors" is available by contacting the CSC at the address below or through our fax retrieval service. Call 602-640-2140, ask for the fax retrieval service, and request document #3005. After business hours, press 8, and follow the instruc-