

# THE IHS PRIMARY CARE PROVIDER



A journal for health professionals working with American Indians and Alaska Natives

February 1999

Volume 24, Number 2

## Ethnic Differences in Cesarean Delivery in New Mexico

*Melissa Schiff, MD, Associate Professor, Department of Obstetrics and Gynecology; and Leah Albers, CNM, DrPH, Associate Professor, College of Nursing, both of the University of New Mexico Health Sciences Center, Albuquerque, New Mexico*

### Abstract

**Objective:** To examine cesarean delivery rates in New Mexico's non-Hispanic, Hispanic, and American Indian women.

**Methods:** Live birth certificate data (1994) from the New Mexico Bureau of Vital Records and Health Statistics were used to analyze cesarean rates by ethnic group. Demographic, prenatal, and intrapartum factors were examined to determine the relationship to cesarean delivery according to ethnic group.

**Results:** Cesarean section rates were highest in non-Hispanic white women (19.6%) and lowest in American Indian women (12.0%). The variation in cesarean delivery was associated with socioeconomic factors, but not with medical conditions before or during labor.

**Conclusion:** Compared to cesarean section rates in the general population of the US, we found lower rates of cesarean delivery among the American Indian population in New Mexico. Additional research evaluating the reasons for this low rate may be useful to reduce the cesarean rate nationwide.

### Introduction

During the 23 year period 1965 to 1988, the cesarean delivery rate in the United States increased fivefold, from 4.5 per 100 deliveries in 1965 to 24.7 per 100 deliveries in 1988.<sup>1</sup> Studies have shown that maternal age,<sup>2</sup> parity,<sup>3</sup> socioeconomic status,<sup>4</sup> insurance coverage,<sup>5</sup> and physician factors<sup>6</sup> influence cesarean delivery rates. The roles of race and ethnicity as contributing factors are less clear. According to one study, in 1990, white and black women had the highest cesarean rates,

while American Indian women had the lowest.<sup>1</sup> Compared with non-Hispanic white women, Hispanic white women have lower rates of cesarean sections.<sup>7</sup> While some studies have evaluated the factors contributing to the high cesarean rates in black and white women, relatively few studies have evaluated the lower cesarean rates in Hispanic and American Indian women. Examination of the reasons for these low rates may suggest prevention strategies to lower the cesarean rates in other population groups.

The childbearing population in the state of New Mexico is primarily comprised of non-Hispanic whites, Hispanic whites and American Indians, and therefore provides a unique opportunity to examine the relationship of ethnicity to cesarean delivery in these three groups. The authors assessed demographic, prenatal, and intrapartum factors to look for associations with ethnic differences in cesarean delivery rates in New Mexico's ethnic populations, using live birth certificate data for births that occurred in the state during 1994.

### In This Issue...

- 17 Ethnic Differences in Cesarean Delivery in New Mexico
- 21 Commentary: Cesarean Deliveries Within the Indian Health System
- 23 Palliative Medicine: Facing the Challenge of Care Beyond Cure
- 26 Focus on Elders: Interdisciplinary Elder Care Teams
- 27 Position Vacancies
- 28 Meetings of Interest
- 30 NCME Videotapes Available
- 30 Native American Medical Literature

## Materials and Methods

The authors utilized the 1994 live birth certificate database compiled by the New Mexico Bureau of Vital Records and Health Statistics. All study variables evaluated were classified based on the birth certificate information. After comparing New Mexico with U.S. population characteristics, we excluded live births of other races (Black, Asian/Pacific Islander, and others) as these accounted for only 3.2% of the New Mexico births.

Variables of interest were demographic characteristics (maternal age, parity, education, marital status), prenatal variables (initiation and adequacy of prenatal care, smoking, weight gain), and intrapartum data. The latter included delivery outcomes (route of delivery, infant birth weight), technical procedures (electronic fetal monitoring, labor induction and augmentation), and complications (hypertension, diabetes, and other labor complications).

Race and ethnicity were assigned according to classifications on the birth certificate. Mother's race was identified on the birth certificate as white or American Indian. Mother's ethnicity was coded Hispanic or non-Hispanic on the birth certificate. We classified women as non-Hispanic white if the mother was identified as white but not of Hispanic ethnicity, and Hispanic if the mother was identified as white and of Hispanic ethnicity. Marital status was classified as unmarried or married. Unmarried status included mothers who were single, widowed, or divorced. Route of delivery was classified as vaginal or cesarean. Vaginal deliveries included those after prior cesarean, and forceps and vacuum deliveries. Cesarean delivery included primary and repeat procedures.

Site of delivery and type of hospital (private, public, etc.) were recorded on the birth certificate, but these variables were not available for analysis by agreement with the New Mexico Bureau of Vital Records and Health Statistics (BVRHS) who provided the data set.

Early prenatal care was defined as care that began in the first trimester. Level of prenatal care was classified using the Kessner Index.<sup>8</sup> The Kessner Index combines the number of prenatal visits with the month prenatal care was initiated and assigns classifications of none, low, medium, and high levels of prenatal care.

Electronic fetal monitoring included external or internal methods. Diabetes included gestational and pre-existing diabetes mellitus. Pregnancy-induced hypertension (PIH) was defined as hypertension that developed during the pregnancy, and excluded chronic hypertension.

We combined labor and delivery complications that have been associated with route of delivery. For this analysis, labor and delivery complications included one or more of the following: meconium, placental abruption, placenta previa, long labor (defined as labor duration of greater than 20 hours), malpresentation (including breech), cephalopelvic disproportion, umbilical cord prolapse, and fetal distress. The presence of these complications was determined as indicated on the birth

certificate.

Because complete population data for a calendar year were used, the need for probability testing is in question. We used software from the SAS Institute (Statistical Analysis System, Cary, North Carolina) on a personal computer for statistical analysis. First, New Mexico live births were compared with US live births for 1994<sup>9</sup> using frequencies of all variables of interest.

Next, recognized and potential risk factors in the New Mexico live birth data file were examined by ethnic group and by route of delivery (vaginal or cesarean), with statistical significance for the difference in proportions assessed by Chi-square testing. Significant differences in the distribution of risk factors by ethnic group and also route of delivery indicated potential confounding in the data and the need for further analysis.

Risk ratios and 95% confidence intervals (CI) for the relationship of ethnic group to route of delivery were calculated utilizing stratified analysis.<sup>10</sup> Crude risk ratios of cesarean delivery by ethnic group were compared with those adjusted for categories of the established and hypothesized risk factors of interest for this study.

## Results

Table 1 compares New Mexico live births (n=27,585) with all US live births for the same year (n=3,952,767). New Mexico's childbearing population was younger and less well educated than all US women. In New Mexico, women were less likely to be married, and the majority were members of minority groups. New Mexico women began prenatal care later and received fewer visits than all US women. Smoking rates in New Mexico were lower, and total weight gain in pregnancy was higher. The use of technologic procedures in labor was similar, but rates of hypertension and diabetes in pregnancy were marginally higher in New Mexico.

Table 2 shows the data reflecting demographic, prenatal, and intrapartum variables in the three major ethnic groups in New Mexico. Significant differences across ethnic groups were observed for all variables except labor and delivery complications. Teen births were more common in New Mexico Hispanic and American Indian women. New Mexico Non-Hispanic white women were more likely to be married and had more formal education than either Hispanics or American Indians. This group also began prenatal care earlier and received more visits. American Indian women had fewer low birth weight (<2500 grams) and more high birth weight (≥4000 grams) infants than the other groups. They were least likely to smoke during pregnancy. Labor induction and augmentation were more commonly used in non-Hispanic white women. Rates of pregnancy-induced hypertension and diabetes were higher in American Indians, however labor complications were consistent across all ethnic groups. Cesarean delivery was highest in non-Hispanic white women and lowest in American Indian women.

**Table 1. Comparison of 1994 New Mexico and US live births**

Variable	New Mexico births (n=27,585) %	US births (n=3,952,767) %
Age		
<20 years	18.0	13.1
20-29 years	53.9	52.9
30-34 years	18.6	22.9
35+ years	9.5	11.1
Education		
<High school graduate	27.4*	22.9
High school graduate	37.4	35.1
Some college	19.1	21.7
College graduate	13.5	20.3
Marital status		
Single	40.9*	32.6
Married	56.2	67.4
Race/Ethnicity		
Non-Hispanic white	36.8	62.3
Hispanic white	46.5	16.9
American Indian	13.2	1.0
Black	1.9	15.8
Other	1.6	4.0
Parity		
Nulliparous	33.3	41.0
Parous	66.7	59.0
Type of delivery		
Vaginal	82.1	78.8
Cesarean section	17.9	21.2
Level of prenatal care		
None	2.0*	1.3
Low	8.9	4.3
Medium	34.5	24.0
High	50.9	70.4
1st trimester prenatal care	68.9	80.2
Alcohol use during pregnancy	1.8	1.7
Smoking during pregnancy	9.8	14.6
Birth weight		
<2500 grams	7.8	7.3
4000 + grams	7.5	10.4
Weight gain during pregnancy		
0 - 24 pounds	28.3	36.1
25 - 35 pounds	39.9	34.1
36 + pounds	31.8	29.8
Labor induction	12.4	14.6
Labor augmentation	15.8	15.2
Electronic fetal monitoring	82.1	80.0
Pregnancy-induced Hypertension	4.2	3.2
Diabetes	3.2	2.6

\* These New Mexico variables do not add to 100% because of missing data.

Proportions of all study variables according to route of delivery are presented in Table 3. Significant differences according to type of delivery were observed for all variables except medium/high levels of prenatal care, labor induction, and fetal monitor use. Risk factors for cesarean delivery were nulliparity and advanced maternal age. Factors linked with

socioeconomic status (marriage, education beyond high school, and receipt of early prenatal care) were also associated with cesarean delivery. Cesareans were more common at the extremes of infant birth weight and when maternal complications were present (PIH, diabetes, or complications in labor and delivery).

Stratified analysis was performed utilizing non-Hispanic white women as the reference group, since they had the highest rate of cesarean delivery. The crude risk ratio for cesarean delivery was 0.91 (95% CI, 0.86-0.96) for Hispanic women and 0.61 (95% CI, 0.56-0.67) for American Indian women. Risk ratios adjusted for categories of the control variables (those found to be significantly different in both Tables 2 and 3) were consistent with the crude risk ratios, demonstrating an absence of confounding in the data.

**Table 2. Demographic, prenatal, and intrapartum variables by ethnicity for New Mexico live births**

Variable	Non-Hispanic White (n=10,181) %	Hispanic (n=12,867) %	American Indian (n=3,645) %
Demographic			
<20 years	10.8	23.6	18.7
≥35 years	12.6	6.8	10.4
>High school	53.0	20.2	22.8
Married	76.6	51.2	30.2
Nulliparous	42.8	40.8	32.4
Prenatal			
Early prenatal care	77.0	63.4	51.1
Medium/High prenatal care	94.1	87.3	79.0
Smoking	15.5	7.6	2.3
Weight gain >35 pounds	32.7	27.6	23.4
Intrapartum			
<2500 grams	7.5	7.5	6.2
≥4000 grams	8.8	6.2	9.4
Labor induction	14.5	11.0	12.0
Labor augmentation	17.9	15.3	11.3
Fetal monitor	83.9	84.3	69.6
Pregnancy induced hypertension	4.6	3.6	5.8
Diabetes	2.5	3.1	5.5
Labor and delivery complications*	17.1	17.9	17.3
Vaginal birth after cesarean	2.7	2.9	3.7
Primary cesarean delivery rate	13.2	11.4	8.0
Repeat cesarean delivery rate	6.4	6.4	4.0
Overall cesarean delivery rate	19.6	17.8	12.0

\* Differences not statistically significant at p<0.05

## Discussion

Our data show that New Mexico's non-Hispanic white women had the highest cesarean rate, with marginally lower rates for Hispanic, and substantially lower rates for American

Indian women. Cesarean delivery was strongly associated with

**Table 3. Demographic, prenatal, and intrapartum variables by route of delivery for New Mexico live births**

Delivery Type	Vaginal (n=21,978) %	Cesarean (n=4,715) %
<b>Demographic</b>		
<20 years	19.1	13.1
≥35 years	8.6	13.6
>High school	32.4	36.9
Married	56.8	63.3
Nulliparous	39.6	44.0
<b>Prenatal</b>		
Early prenatal care	66.1	71.2
Medium/High prenatal care*	88.3	91.0
Smoking	9.5	11.8
Weight gain >35 pounds	28.3	32.3
<b>Intrapartum</b>		
<2500 grams	5.9	14.1
≥4000 grams	6.8	9.8
Labor induction*	12.4	12.5
Labor augmentation	17.4	8.3
Fetal monitoring*	82.6	80.0
Pregnancy induced hypertension	3.5	7.9
Diabetes	2.7	5.7
Labor and delivery complications	10.6	49.8
* Differences not statistically significant at p<0.05		

socioeconomic factors, but not with medical complications before or during labor. Socioeconomic status is known to be a strong and reliable predictor of an individual's health.<sup>11</sup> Even though lower income and minority women have excess obstetric pathology,<sup>12</sup> these women are at lower risk for a cesarean birth, in New Mexico and elsewhere.<sup>4</sup>

Hispanics are recognized as a heterogeneous population,<sup>13</sup> but generally their health status is more similar to non-Hispanic whites than to other minority groups with whom they share numerous social and economic characteristics.<sup>14</sup> In the New Mexico data, the rate of cesarean delivery for Hispanic women was closer to that of non-Hispanic whites, although demographic and prenatal risk factors (age, education, marital status, pattern of prenatal care, gestational weight gain) were more like those of American Indian women. A recent study<sup>7</sup> in California found somewhat lower cesarean rates in US-born Hispanic women compared with non-Hispanic white women.

Pregnancy outcomes of American Indian women are not well studied, and little published data exist. In New Mexico, American Indian women had a 12% cesarean rate, a rate similar to countries in western Europe,<sup>15</sup> and well below the US Public Health Service goal for the year 2000.<sup>16</sup> The majority (60%) of American Indian women in New Mexico are

delivered in Indian Health Service (IHS) facilities (personal communication, Tony Ortiz, Statistical Program Manager). The IHS is a federally supported program that guarantees access to care for pregnancy and delivery. No financial incentives exist for IHS providers to perform cesareans. Most women are attended in labor by certified nurse-midwives who encourage ambulation and upright positions, and epidural anesthesia for pain management in labor is not routinely available (personal communication, Jonathan Steinhart, MD, Alan Waxman, MD). As no published reports exist about the management of American Indian women in labor at IHS or other types of facilities, we can only hypothesize that the above factors may play a role in the low cesarean rate. Other, unmeasured factors may also play a role.

This study has several limitations. We used vital records data and were limited to the variables reported on live birth certificates. Many birth certificate variables (maternal race, marital status, route of delivery, infant birth weight,) are known to be reliable items when compared with medical record data.<sup>17,18</sup> Other variables (number of prenatal visits, month prenatal care began, alcohol use during pregnancy, obstetrical procedures, and medical complications), however, are known to be underreported.<sup>17,18</sup> Reporting of medical complications may be biased by type of delivery (overreporting with cesareans) or by ethnicity. Some misclassification of maternal race or ethnicity is also possible, but is unlikely to bias our results in a predictable direction. Site of delivery and type of hospital were not analyzed because these variables were not available in the data set we received from the New Mexico BVRHS. Finally, we did not include data on payment source for delivery. Prior research has shown that insurance status plays a role in cesarean delivery rates. In New Mexico, 48% of all deliveries are to women in the Medicaid program.<sup>19</sup>

Reducing the rate of cesarean deliveries is a major public health priority in the United States. *Healthy People 2000* set the national goal for such deliveries at 15% by the year 2000,<sup>16</sup> a rate which is very unlikely to be met. Numerous strategies to lower the cesarean rate have been studied in recent years including external cephalic version of breech presentations,<sup>20</sup> peer review of physician decisions to perform a cesarean,<sup>21</sup> active management of labor,<sup>22</sup> and increased use of certified nurse-midwives.<sup>23</sup> Each of these has focused on a single contributing factor to the overall cesarean rate, and none has made a significant impact on the overall rate nationally. Our report suggests a need for broader, ecological analysis of systems which maintain a very low cesarean rate, such as that operating for American Indian women in New Mexico. Understanding factors that encourage the normal progression of labor, resulting in vaginal delivery will require methods which can assess multiple variables. Expectations of both patients and providers, availability of technology, use of specific intrapartum care measures (ambulation, emotional support, and nonpharmacologic measures of pain relief), collaborative care, and medico-legal liability must all be evaluated to understand

their roles in the cesarean delivery rate. □

### Acknowledgment

The authors would like to thank the New Mexico Department of Health, Bureau of Vital Records and Health Statistics for allowing the use of the live birth certificate data set, as well as their assistance with this manuscript.

### Correspondence

Please address correspondence to Melissa Schiff, MD, University of New Mexico Health Sciences Center, Department of Obstetrics and Gynecology, 2211 Lomas NE, Albuquerque, New Mexico, 87131. Telephone (505) 272-6383; fax (505) 272-6385; e-mail [Melissa\\_Schiff@somasf.unm.edu](mailto:Melissa_Schiff@somasf.unm.edu).

### References

1. *Morbidity and Mortality Weekly Review*. 1995;44(15):303-307
2. Peipert JF, Bracken MB. Maternal age: an independent risk factor for cesarean delivery. *Obstet Gynecol*. 1993;81:200-5
3. Parrish KM, Holt VL, Easterling TR, Connell FA, LoGerfo JP. Effect of changes in maternal age, parity, and birth weight distribution on primary cesarean delivery rates. *J Am Med Assoc*. 1994;271:443-7
4. Gould JB, Davey B, Stafford RS. Socioeconomic differences in rates of cesarean section. *N Eng J Med*. 1989;321:233-9
5. Stafford RS. Cesarean section use and source of payment: an analysis of California hospital discharge abstracts. *Am J Public Health*. 1990;80:313-5
6. Goyert GL, Bottoms SF, Treadwell MC, Nehra PC. The physician factor in cesarean birth rates. *N Eng J Med*. 1989;320:706-9
7. Braverman P, Egerter S, Edmonston F, Verdon M. Racial/ethnic differences in likelihood of cesarean delivery, California. *Am J Public Health*. 1995;85:625-30
8. Kessner DM, Singer J, Kalk CE, Schlesinger ER. Infant death: an analysis by maternal risk and health care. Washington, DC: Institute of Medicine and National Academy of Sciences, 1973;50-65
9. Ventura SJ, Martin JA, Matthews TJ, Clarke SC. *Advance report of final natality statistics, 1994*. Hyattsville MD: National Center for Health Statistics; 1996. (Monthly vital statistics report, vol 44, no 11, supp.)
10. Rothman KJ. *Modern epidemiology*. Boston: Little, Brown Co.;1986
11. Winkleby MA, Jatulis DE, Frank E, Fortman SP. Socioeconomic status and health: how education, income, and occupation contribute to risk factors for cardiovascular disease. *Am J Public Health*. 1992;82:816-20
12. Amante D, Brandt N. The social ecology of obstetrical competence. *Social Science Medicine*. 1978;12:391-401
13. Becerra JE, Hogue CJR, Atrash HK, Perez N. Infant mortality among Hispanics: a portrait of heterogeneity. *J Am Med Assoc*. 1991;265:217-21
14. Markides KS, Coreil J. *The health of Hispanics in the southwestern United States: an epidemiologic paradox*. Public Health Reports; 1986.101:253-65
15. Notzon FC, Cnattingius S, Bergsjö P, Cole S, Taffel S, Irgens L, Daltveit AK. Cesarean section delivery in the 1980s: international comparison by indication. *Am J Obstet Gynecol*. 1994;170:495-504
16. Healthy People 2000: National health promotion and disease prevention objectives. Hyattsville, MD:1996. DHHS publication no. (PHS) 91-50212
17. Piper JM, Mitchel EF, Snowden M, Hall C, Adams M, Taylor P. Validation of 1989 Tennessee birth certificates using maternal and newborn hospital records. *Am J Epidemiol*. 1993;137:758-68
18. Buescher PA, Taylor KP, Davis MH, Bowling JM. The quality of new birth certificate data: a validation study in North Carolina. *Am J Public Health*. 1993;83:1163-6
19. Paid by Medicaid. Bureau of Vital Records and Health Statistics, New Mexico Department of Health, 1996
20. Zhang J, Bowes WA, Fortney JA. Efficacy of external cephalic version: a review. *Obstet Gynecol*. 1993;82:306-12
21. Bicknell NA, Zdeb MS, Applegate MS, Roohan PJ, Siu AL. Effect of external peer review on cesarean delivery rates: a statewide program. *Obstet Gynecol*. 1996;87:664-7
22. Lopez-Zeno JA, Peaceman AM, Adashek JA, Socol ML. A controlled trial of a program for the active management of labor. *N Eng J Med*. 1992;326:450-4
23. Butler J, Abrams B, Parker J, Roberts JM, Laros RK. Supportive nurse-midwife care is associated with a reduced incidence of cesarean section. *Am J Obstet Gynecol*. 1993;168:1407-13

## COMMENTARY □

# Cesarean Deliveries Within the Indian Health System

Alan G. Waxman, MD, MPH, IHS Senior Clinician for Obstetrics and Gynecology, Gallup, New Mexico

### Introduction

In 1995 more than one baby in five (20.5%) in the United States was born by cesarean section.<sup>1</sup> This increase from the rate of 5% in 1970 has been sparked by many factors, including an increase in the diagnosis of “dystocia” and a heightened fear of medicolegal repercussions for adverse fetal outcomes.<sup>2</sup> These medicolegal pressures coincided with the development and widespread use of electronic fetal monitoring. Unfortunately, this technology was accompanied by consider-

able variation in the defining threshold for fetal distress; hence there were increased rates of c-section for this indication. Fear of litigation fueled the trend away from vaginal delivery of breech presentation as well. Furthermore, until 1978, cesarean delivery was the norm for women who had previously given birth by cesarean section.<sup>3,4</sup> In 1981 the National Institutes of Health convened a task force to study the escalating rates of cesarean section.<sup>5</sup> Cesarean delivery is associated with higher morbidity, longer hospital stays, and slower convalescence than vaginal birth.

One of the national health promotion and disease prevention objectives for the year 2000 is to reduce the rate of cesarean sections to 15 per 100 deliveries.<sup>1</sup> As Drs. Schiff and

---

Albers observe in their paper in this month's *Provider (The IHS Provider, Vol 24, No. 2, pp17-21)*, the cesarean section rate among American Indian women in New Mexico already meets — and exceeds — that target.<sup>6</sup> Their study, based on birth certificate data, does not distinguish births at Indian Health Service hospitals, nor do their data reflect the activities of facilities elsewhere in Indian country. In this commentary, I'd like to share self-reported data from IHS and tribal health facilities, comment on regional variations, describe a program that has successfully kept c-section rates down, and comment on the role of vaginal birth after cesarean (VBAC).

### **Cesarean section rates in IHS and tribal hospitals**

In FY 1997, seventeen IHS and three tribal hospitals provided full obstetrics services including cesarean deliveries. Prior to an August 1998 meeting of IHS, tribal, and urban obstetrician/gynecologists and certified nurse midwives, each facility was asked to report certain workload statistics including the number of deliveries and cesarean sections. C-section rates ranged from 9.2% at a larger hospital with close to one thousand births, to 36.1% at a smaller facility with fewer deliveries. There was wide regional variation within the system, with lowest rates in IHS and tribal hospitals in the southwest and Alaska (range 9.2% to 12.8%), mid-range in hospitals in the northern plains (14.5% to 15.6%), and highest in the facilities of the south central US (16.4% to 36.1%). Interestingly the aggregate c-section rate of the IHS facilities in New Mexico with full obstetrical services was 10.7% — lower than the 12.0% rate for New Mexico American Indian women in 1994, reported in Drs. Schiff and Albers's study.<sup>6</sup>

### **Why is there so much variation within the Indian health system?**

How do we explain such wide variation in c-section rates within the Indian health system? Indian health hospitals with full service obstetrics and gynecology departments across the country have equally high risk patients. The ob/gyn specialists are similarly trained across the system and rely on the same national standards. It has been noted by some that provision of care by certified nurse midwives may be associated with lower c-section rates.<sup>7</sup> No correlation was found, however, between the use of midwives and c-section rates in this IHS and tribal sample. Rates of repeat c-section may be influenced by regional differences in patient expectations and by the market forces that now influence the practice of medicine. Patient expectations can be modified by education, but in some areas of Indian country, patients who prefer repeat c-sections take their business to those hospitals more likely to honor their choice. Patient preference for repeat c-section has been shown to affect c-section rates in communities outside of Indian country as well, prompting calls for patient education on this issue.<sup>8</sup>

### **One IHS hospital's experience**

One IHS medical center with a low c-section rate based on

the 1997 data has, since the early 1980s, emphasized obstetrics practices that help to keep c-section rates low. All patients with breech presentation are offered external cephalic version at 37 weeks. Women presenting in labor with breech presentation are evaluated for suitability of vaginal breech delivery (although few have taken this option). All cesarean sections are subject to peer review in a monthly departmental meeting. Cases are critically discussed, and indications for c-sections must be justified, yet the obstetrician is held accountable for excellent maternal and neonatal outcomes. While such peer review has been shown to be efficacious in decreasing c-section rates,<sup>9</sup> it is difficult in small service units with only one obstetrician. Lastly, all women presenting with previous c-sections are evaluated for safety of VBAC. Those with a single, low transverse uterine scar are encouraged to labor, and the option is generally held open to those with two previous c-sections. The community expectation favors vaginal delivery, and 89% of those who opt for VBAC are successful. The experience at this large IHS facility is not unique. Many of the practices have been implemented with varying success at most IHS and tribal hospitals.

### **Vaginal Birth After Cesarean (VBAC)**

Finally, a few words about VBAC are in order. Successful vaginal birth after a prior cesarean section is associated with lower maternal morbidity, shorter hospital stays, and usually no greater neonatal complications than delivery by elective repeat cesarean section.<sup>2</sup> It is the 20 to 30% of women who attempt VBAC unsuccessfully who experience increased maternal and neonatal morbidity.<sup>10</sup> The pendulum of obstetrical care, which swung away from routine repeat c-section in the early 1980s, has recently begun to make adjustments toward fewer VBACs. Renewed caution about the safety of VBAC has been largely sparked by the rare but sometimes catastrophic occurrence of uterine scar separation. While usually occurring as asymptomatic dehiscence, catastrophic uterine rupture may occur, which may lead to serious maternal morbidity or neurologic complications, or death of the infant.<sup>11</sup> Rupture occurs in 5-8 per 1,000 women attempting VBAC.<sup>3</sup> Rates increase with two or more prior c-sections or with vertical uterine incisions, especially those extending into the muscular myometrial tissue of the uterine corpus. Risk of rupture can be reduced, though not eliminated, by carefully selecting candidates for VBAC. Operative reports from previous cesarean sections should be reviewed for type of uterine scar. Risks and benefits of VBAC versus elective repeat cesarean section should be thoroughly discussed with the patient, with good documentation. VBAC should not be offered at facilities that cannot provide rapid cesarean section and hysterectomy if needed. Women electing VBAC should be encouraged to present early in labor, and electronic fetal monitoring should be employed. Nonreassuring fetal heart rate tracings should be acted upon promptly. Documentation of prior cesarean section should be clearly identified in the medical record, and medical and nursing staff should be alert to the fact that this is a potential risk factor in

pregnant women.

### Conclusions

While the year 2000 objective for c-section rates is to decrease it to no higher than 15%, in truth, there is no evidence-based “ideal” rate. The balance of vaginal delivery versus cesarean section is determined on a case by case basis. Factors that put the infant at risk must be weighed against those that could endanger the mother. Every pregnancy can test the science and the art of obstetrics. Certain measures can be taken to tilt the scale toward vaginal delivery. These include the use of rigorous definitions of fetal distress and failure to progress in labor before turning to cesarean delivery, and the use of external cephalic version of appropriate infants in breech presentation or allowing selected breech cases to deliver vaginally. Most women with prior low transverse c-section scars can safely labor in settings where emergency surgery can readily be provided if needed. As Jason Woo, MD, of the Phoenix Indian Medical Center, observed at the August 1998 ob/gyn clinicians meeting, however, the best way to lower the rate of repeat c-sections is to lower the primary c-section rate. □

### References

1. National Center for Health Statistics. Healthy People 2000 Review, 1997. Hyattsville, MD Public Health Service. 1997
2. ACOG Practice Bulletin. Vaginal Birth After Previous Cesarean Delivery. Number 2, October 1998
3. Leveno KJ. Controversies in ob-gyn: Should we rethink the criteria for VBAC? Yes. VBAC is riskier than previously anticipated. *Contemporary Ob/gyn* 1999;44:57-65
4. Flamm BL. Once a cesarean, always a controversy. *Obstet Gynecol* 1997;90:312-15
5. National Institutes of Health, The Cesarean Birth Task Force. Cesarean Childbirth. NIH Publication 82-2067. Bethesda, MD: National Institutes of Health, 1981
6. Schiff M, Albers L. Ethnic differences in cesarean delivery in New Mexico. *The IHS Provider* 1999; 24:17-21
7. Butler J, Abrams B, Parker J, et al. Supportive nurse-midwife care is associated with a reduced incidence of cesarean section. *Am J Obstet Gynecol* 1993;168:1407-13
8. Gates PE. Think globally, act locally: an approach to implementation of clinical practice guidelines. *Jt Comm J Qual Improv* 1995; 21:71-84
9. Myers SA, Gleicher N. A successful program to lower cesarean section rates. *N Eng. J Med* 1988;319:1511-6
10. McMahon MJ, Luther ER, Bowes WA, Olshan, AF. Comparison of a trial of labor with an elective second cesarean section. *N Engl J Med* 1996;335:689-95
11. Scott JR. Mandatory trial of labor after cesarean delivery: an alternative viewpoint. *Obstet Gynecol* 1991;77:811-14

---

---

# Palliative Medicine: Facing the Challenge of Care Beyond Cure

---

*Judith A. Kitzes, MD, MPH, Chief Medical Officer, Albuquerque Area IHS, Albuquerque, New Mexico*

---

All Native American age groups experience certain diseases and injuries for which there is no cure; however, the growing population of Native American elders is carrying the greatest burden of chronic illness and pain-related symptoms. In the United States, public opinion and academic medicine are beginning to face the challenge of “care beyond cure”: those comfort measures offered when a disease process is not responsive to curative treatment. The emerging field of palliative medicine is generating increasing dialogue in medical societies, clinical journals, foundations, and consumer advocacy organizations.<sup>1</sup>

### Elements of the Dialogue

**Definition.** Currently, a standard definition of palliative medicine is still evolving. To palliate, literally, means, “to cloak.” Beginning in England in 1973,<sup>2</sup> the term “palliative

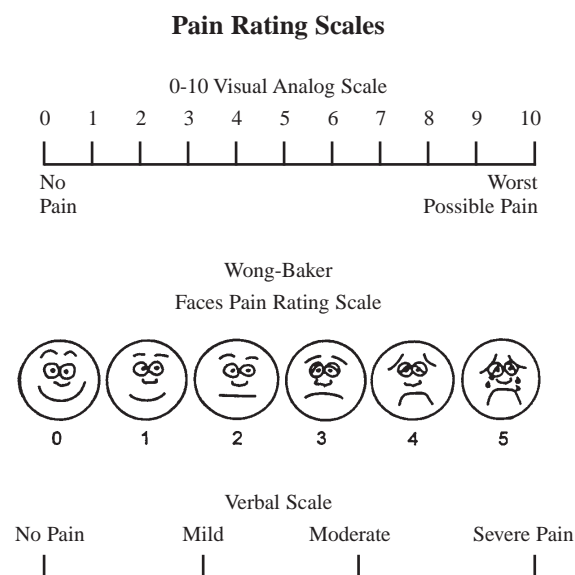
medicine” was used to describe an array of hospice services that were provided for the dying. As research and clinical experience have expanded throughout the world, palliative medicine has come to encompass “terminal care,” “comfort care,” “supportive care,” “pain management,” “end-of-life care,” and “hospice care.”<sup>3</sup> This fledgling field has attracted clinicians from diverse backgrounds: surgeons, internists, pediatricians, anesthesiologists, ethicists, geriatrics specialists, family practice physicians, oncologists, cardiologists, and those in the field of public health, each with their own goals, values, and definitions.

However diverse their approaches, their shared vision focuses on the desire to alleviate pain and suffering when a disease process shows no further potential for response to curative treatment. This goal has led to a central tenet of palliative care: to **assess pain as a fifth vital sign**. If one does not routinely assess and document pain as a fifth vital sign, along with blood pressure, respiration, temperature, and pulse, then the opportunity to prevent prolonged suffering may be missed.

From the outset, palliative medicine has defined itself as a *family oriented, interdisciplinary, team approach* centered on its responsiveness to the needs and values of the patient. The effect of this view has been to flatten the hierarchical working relationships that exist between the patient, physicians, nurses, social workers, ethicists, pharmacists, clergy, nutritionists, behavioral health care workers, and alternative and complementary healers.

**Palliative Care Settings.** As the definition of palliative medicine has evolved, it has come to embrace more diverse settings. Palliative care services are currently provided in patient's homes, free standing and hospital-based ambulatory clinics, inpatient hospital units, hospital-associated residential hospices, and in the offices of alternative and complementary healers, among many others. Patients who seek palliative services present with a wide spectrum of disease processes, such as advanced cancer, chronic obstructive lung disease, congestive heart failure, degenerative muscular and neurological illnesses, osteoarthritis, rheumatoid arthritis, fibromyalgia, diabetes, sickle cell anemia, vascular ailments, chronic headaches, AIDS, dementia, and chronic back pain.

**Assessment and Management of Pain and Other Symptoms.** Tools for the assessment of pain are readily available. These tools may use a numerical scale, a series of faces demonstrating changing expressions, colors to depict increasing levels of intensity, or a combination of any of these elements. Such tools are used to help the patient communicate his or her self-reported level of pain. This assessment of pain will allow the patient and provider to develop a therapeutic alliance.



Algorithms for the assessment and management of anxiety, agitation, poor appetite, ascites, bladder spasm, bowel care, candidiasis, depression, diarrhea, dyspnea, pruritus, sleep disturbance, nausea, vomiting, chronic pain, and opioid induced nausea, sedation, and constipation have been

developed.<sup>4</sup> Nonpharmacologic approaches are integral elements of palliative care. These include, but are not limited to, acupuncture, relaxation techniques, biofeedback, massage, music, art therapy, transcutaneous electrical nerve stimulation (TENS), and spiritual counseling.<sup>5</sup>

### What Can We Do in the Indian Health Service?

**Develop an Area Policy.** The Albuquerque Area IHS (AAIHS) has developed and will be implementing an Area-wide policy for a pain management and palliative medicine program. The pain management/palliative medicine program will institute pain assessment as a fifth vital sign, allowing for the integration of awareness of chronic pain and related chronic disease symptoms into ongoing clinical care. The policy states:

The AAIHS will promote/provide a standardized approach to the patient with intractable pain that emphasizes a nonjudgmental, multimodal, individualized care plan. Such a plan should increase access to known therapies, improve continuity of care, and maximize provider communication for the relief of pain and suffering in all forms of chronic pain in all stages of a person's life.<sup>6</sup>

The IHS Elder Initiative will seek to implement this policy on an IHS wide basis.

**Collaboration with Medical Schools, Palliative Medicine Centers, Hospice Networks, and VA Hospitals.** To further the goal of integrating palliative medicine into clinical care, the Albuquerque Area IHS is collaborating with the University of New Mexico Medical Center under a Robert Wood Johnson grant to participate in a network of rural New Mexico hospices to enhance palliative medicine training for IHS providers. The grant supports the development of a Zuni tribal home health hospice service with linkages to the Zuni Public Health Service Indian Hospital. One nurse and one physician from Zuni IHS will receive training toward certification in palliative medicine. In addition, the Regional Veterans Administration Hospital in Albuquerque will become a partner in improving outreach palliative medicine services to Native American veterans who wish to receive care in IHS facilities.

**Seek Training for IHS/Tribal Providers.** The resource list accompanying this article is a good start in accessing available information and training in palliative medicine. In 1999, the content of the board certification examination in Internal Medical will include 10% on Geriatrics and 10% on Palliative Medicine.

**Increase Community Awareness.** We can all promote discussions about the philosophy of and services available under palliative care programs when we interact with health boards, tribal leadership, and elder groups. We may feel constrained by the cultural norms in the communities in which we serve with regard to the ways we talk about death and dying. We need to recognize and respect the guidance given to us, our patients, and the community leaders by these cultural values.



---

As we learn how to talk to each other about these difficult issues, we will be able to work together toward the common goal of alleviating suffering.

## Conclusion

In conclusion, palliative care is a growing medical field. As IHS and tribal providers, we have the opportunity to enhance care to those in pain, and to reduce suffering from chronic illness in the elderly. Collectively, our Indian health care system can continue its innovative public health tradition by institutionalizing care beyond cure. □

## Resources

### Written References:

*Palliative Medicine*, 2nd Edition, Robert Woodruff, MD  
*Oxford Textbook of Palliative Medicine*, Revised 1997 (paperback), Derek Doyle, MD  
*Topics in Palliative Care*, Volumes I, II, and III, Russell Portney, MD  
*Managing Pain Before It Manages You*, Margaret Caudill, MD  
*Symptom Management Algorithms for Palliative Care*, 1st Edition, Linda Wrede-Seaman, MD  
Books can be ordered at Growth House: [www.growthhouse.org](http://www.growthhouse.org), or Mentor Books: [www.mentorbooks.com](http://www.mentorbooks.com)

### *Journal of Palliative Medicine*

Mary Ann Liebert, Inc.  
2 Madison Avenue  
Larchmont NY 10538-1962  
(914) 834-3100  
e-mail: [info@liebertpub.com](mailto:info@liebertpub.com)

*Clinical Practice Guidelines* from the Agency for Health Care Policy and Research (AHCPR)  
Cancer Pain: (800) 4-CANCER  
Acute Pain: (800) 358-9295  
[www.ahcpr.gov](http://www.ahcpr.gov)

### *Primer of Palliative Care*

*Unipac: Self Study Program, Hospice/Palliative Care*  
American Academy of Hospice and Palliative Medicine  
e-mail: [aahpm@aahpm.org](mailto:aahpm@aahpm.org)

### Internet Sources:

Growth House, Inc.

[www.growthhouse.org](http://www.growthhouse.org)  
e-mail: [info@growthhouse.org](mailto:info@growthhouse.org)

The Edmonton Palliative Care Program

[www.caritas.ab.ca/~palliate](http://www.caritas.ab.ca/~palliate)

Wisconsin Cancer Pain Initiative

[www.wisc.edu/polmorph/wcpi](http://www.wisc.edu/polmorph/wcpi)  
e-mail: [wcpi@facstaff.wisc.edu](mailto:wcpi@facstaff.wisc.edu)

The MAYDAY Pain Resource Center

e-mail: [mayday-pain@smtplink.coh.org](mailto:mayday-pain@smtplink.coh.org)

Center to Improve Care of the Dying

[www.gwu.edu](http://www.gwu.edu)

The American Geriatrics Society

[www.americangeriatrics.org](http://www.americangeriatrics.org)

American Academy of Hospice and Palliative Medicine

[www.aahpm.org](http://www.aahpm.org)

Last Acts

[www.lastacts.org](http://www.lastacts.org)

### Organizations:

Wisconsin Cancer Pain Initiative

1300 University Avenue, Rm. 4720  
Madison, WI 53706  
Phone: (608) 262-0978

National Hospice Organization

1901 N. Moore St. Suite 901  
Arlington, VA 22209  
Phone: (703) 243-5900

National Chronic Pain Outreach Association

7979 Old Georgetown, Suite 100  
Bethesda, MD 20814-2429  
Phone: (301) 652-4948

The MAYDAY Pain Resource Center

1500 East Duarte Road  
Duarte, CA 91010  
Phone: (818) 301-8941

The American Geriatrics Society

770 Lexington Avenue, Suite 300  
New York, NY 10021  
Phone (212) 308-1414

Americans for Better Care of the Dying

2175 K Street NW, Suite 820  
Washington, DC 20037-1803  
Phone (202) 530-9864

Veterans Administration End of Life Initiative

810 Vermont Avenue NW, 114  
Washington, DC 20420  
Phone (202) 273-6488

### References

1. Billings J. What is palliative care? *Journal of Palliative Medicine*. 1993;1(1):73-81
2. Mount BM. The Royal Victoria Hospital Palliative Care service: A Canadian Experience. In: Saunders C, Kastenbaum R, eds. *Hospice Care on the International Scene*. New York: Springer; 1997:73-85
3. Bascom PB. A hospital-based comfort care team: consultation for seriously ill dying patients. *American Journal Hospice Palliative Care*. 1997;14:57-40
4. Wrede-Seaman L. *Symptom Management Algorithms for Palliative Care*. 1st Ed. Yakima, WA: Intellicard; 1996
5. Caudill M. *Managing Pain Before It Manages You*. New York: The Guilford Press; 1995
6. Albuquerque Area IHS. *Policy on Pain Management/Palliative Medicine Program*. 1999

## Interdisciplinary Elder Care Teams

---

*Bruce Finke, MD, Director, Elder Care Initiative, and Staff Physician, Zuni-Ramah Service Unit, Zuni, New Mexico*

---

This article continues a series exploring the use of interdisciplinary elder care teams as a mechanism to improve care within the Indian health care system. In previous articles I have explored the rationale for the interdisciplinary elder care team, its composition, and some strategies for getting a team started and focused. In this article I will identify several functioning teams, look briefly at their makeup and projects, and give contacts for those who may have questions.

**Southern Ute Health Center (SCUSU), Albuquerque Area.** This is a team largely based in the clinic with close collaboration with tribal providers, especially CHRs. They have been operating a geriatric assessment program with home visits since 1991. They have also developed a home safety and injury prevention program. For more information, contact George Macted, MD; or Susan Turner, RN, Director of Public Health Nursing at (970) 563-4581.

**Fort Peck Service Unit, Billings Area.** This is a team largely based at the IHS clinic, working with tribal programs. Projects include a wellness program for elders, combining health education, socialization, and health monitoring. The team is working with the diabetes team to target diabetic elders. For more information, contact Roman Hendrickson,

MD at (406) 768-3491.

**Tuba City Service Unit, Navajo Area.** This team integrates community and hospital-based providers. They are currently performing a community eldercare needs assessment, have begun work on developing a community-based elder daycare program, and are looking at the long term care needs of the community. They have successfully applied for grants to fund some of their efforts. For more information, contact Fran Kosik, RN, Director, Family Wellness Center; or Harry McGinnity, MD at (520) 283-2501.

**Zuni Comprehensive Community Health Center (ZRSU), Albuquerque Area.** This team is largely hospital-based, with a close working relationship with tribal programs, including the Senior Center, the Home Health Agency, and CHRs. Projects include a multidisciplinary geriatric assessment clinic, a case management clinic, a bathroom fall and injury prevention program, and education initiatives within the hospital. For more information, contact Tina Tah, RN, Director of Public Health Nursing at (505) 782-4431.

I know that there are other elder care teams working in IHS, tribal, and urban program clinics and hospitals. Let me know what you are doing and I will share it in these pages. Plan on using May 1999, which is Older American's Month in the International Year of the Older Person, to build and grow the teams we need to improve care for our elders. □

---

## The Annual Elders Issue

May is National Elders Month. In recognition of this, for the past three years *The Provider* has decided its May issue to articles related to the health and health care of Indian elders. We would like to invite our readers to submit articles for this issue as soon as possible. In addition to clinical or descriptive articles, we would welcome submissions from elders themselves who are willing to share their viewpoints about the

status of health care for Indian elders and their perceptions of future needs. If you would like to submit an article, please send it to:

Editor  
*The Provider*  
1616 East Indian School Road, Suite 375  
Phoenix, Arizona 85016

---

## POSITION VACANCIES □

*Editor's note: As a service to our readers, The IHS Provider will now publish, on a space available basis, notices of clinical positions available. Indian health program employers should send brief announcements on an organizational letterhead to: Editor, The IHS Provider, The IHS Clinical Support Center, 1616 East Indian School Road, Suite 375, Phoenix, Arizona 85016. Submissions will be run for two months, but may be renewed as many times as necessary. Tribal organizations that have taken their tribal "shares" of the CSC budget will need to reimburse CSC for the expense of this service. At this time we do not plan to run ads for "positions wanted." The Indian Health Service assumes no responsibility for the accuracy of the information in such announcements.*

### **Family Practice Physician Flandreau, South Dakota**

The Flandreau tribal health clinic in Flandreau, South Dakota is seeking a family practice physician to do primary care, outpatient obstetrics, limited inpatient care, and limited standby call coverage in a solo practice. The incumbent would have privileges at the local hospital. Flandreau is a community of 3000 located only 40 miles north of Sioux Falls. Excellent salary and benefits and loan repayment offered. For more information contact Bruce Allen, Health Administrator, 701 West Broad Avenue, Flandreau, SD 57028; phone (605) 997-3922; fax (605) 997-2841.

### **Primary Care Physician Crow Agency, Montana**

The Crow Northern Cheyenne PHS hospital has immediate openings for a family practitioner, internist, or an internal medicine-pediatrics physician, to practice the full scope of primary care medicine (with or without obstetrics). The Crow hospital is JCAHO accredited, and is currently staffed by seven family practitioners, one internist, two pediatricians, and an obstetrician/gynecologist surgeon. Loan repayment and competitive salary are offered. Crow is located in south central Montana, with nearby quality fly fishing, hunting, cross-country and downhill skiing, and boating available. Crow PHS hospital is a new, beautiful, well run facility. If hired, you would join a staff of dedicated, long-term IHS primary care physicians. For more information, contact Dr. Robert Byron, Chief Medical Officer, or Paula Slyker, Medical Staff Specialist, at (406) 638-3301; e-mail [rgbyron@mcn.net](mailto:rgbyron@mcn.net).

### **Executive Director San Jose (Santa Clara Valley), California**

The Indian Health Center of Santa Clara Valley is seeking a senior manager to oversee medical, dental, and human services; the WIC nutrition program; and community health services programs. BA/BS is required, with a masters degree in health, social services, or business administration preferred. Five years management/supervisory experience in health or human service agency. Knowledge of American Indian culture,

Medi-Cal, and managed care a plus. Excellent verbal, written, and computer skills. Send resume and salary history by 3/15/99 to IHC, 1333 Meridian Avenue, San Jose, CA 95125; or fax to (408) 269-9273. Equal Opportunity Employer. Preference to American Indian applicants (Title 25).

### **Public Health Nutritionist McCloud, Oklahoma**

The Kickapoo Tribe of Oklahoma has an immediate opening for the Director of the Elderly Nutrition Center/Diabetic Educator. The Kickapoo Tribe of Oklahoma operates a comprehensive ambulatory health center under PL 93-638 and an Elderly Nutrition Center under Title VI. McCloud, Oklahoma is located 30 minutes east of the large metropolitan area of Oklahoma City, Oklahoma. Central Oklahoma has an abundance of lakes, rivers, golf courses, and other recreational amenities. Several universities are within easy driving distance, including the University of Oklahoma, Oklahoma State University, and Central State University. The incumbent will provide overall direction and guidance to the Elderly Nutrition Program and the Diabetic Education Program. The incumbent will work closely with the medical staff of the health center. Full benefit package including health and life insurance with a competitive salary of \$36,000 to \$38,000. Must be a licensed dietitian and have a bachelor of science degree in nutrition. For more information contact Gary Wabaunsee, Health Director, P. O. Box 1360, McCloud, Oklahoma 73072; telephone (405) 964-2677.

### **Family Physician Sisseton, South Dakota**

The Sisseton IHS has immediate openings for family practice physicians to practice the full scope of family medicine, to include obstetrics. Competitive salary and career benefits as a federal employee are offered. To discuss this opportunity, contact Audrey German at (800) 553-2145; e-mail [agerman@tics.com](mailto:agerman@tics.com); or mail your *curriculum vitae* to the Sisseton IHS, P. O. Box 189, Sisseton, SD 57262.

---

## MEETINGS OF INTEREST □

### **IHS Advanced/Refresher Colposcopy Workshop March 24-26, 1999; Albuquerque, New Mexico**

This workshop is designed for obstetricians/gynecologists, family physicians, and advanced practice clinicians who have had some training in colposcopy. The superb national faculty will provide an update and review in screening and diagnosing diseases of the female lower genital tract. Sessions will utilize small group case-based learning in addition to lecture format. Additional sessions will cover screening and diagnosis of breast disease, clinical manifestations of HPV, and treatment of preinvasive cervical disease. The IHS Clinical Support Center is the accredited sponsor; the CSC is accredited by the Accreditation Council for Continuing Medical Education to sponsor continuing education for physicians. For more information please contact Alan Waxman, MD at (505) 722-1000, or Roberta Paisano at (505) 248-4132.

### **Advances in Indian Primary Care April 14-16, 1999; Albuquerque, New Mexico**

This is the second annual continuing medical education course designed for primary care physicians who work in Indian health at federal, tribal, and urban sites. The course is intended to be an opportunity for new and experienced primary care physicians to learn about advances in clinical care specifically relevant to American Indian and Alaska Native populations, with an emphasis on southwestern tribes. The course will serve well as a clinical orientation for primary care clinicians new to Indian health. Medical students and residents who are interested in serving Indian populations are also welcome; it would be an excellent opportunity to seek placement at practice sites.

The course is presented by the IHS Senior Clinicians in Family Practice, Internal Medicine, Pediatrics, and Obstetrics and Gynecology; the University of New Mexico Health Sciences Center School of Medicine Area Health Education Center (AHEC); and the IHS Clinical Support Center (the accredited sponsor). The IHS Clinical Support Center is accredited by the Accreditation Council for Continuing Medical Education to sponsor continuing education for physicians. The IHS Clinical Support Center designates this activity for 16 hours of category 1 credit toward the Physician's Recognition Award of The American Medical Association.

The course will begin Wednesday afternoon, April 14 and end at noon on Friday, April 17. More information will be published in future editions of *The IHS Provider*. For more information or a registration form, contact Chuck North, MD, Senior Clinician for Family Practice, PHS Indian Hospital, 801 Vassar Drive NE, Albuquerque, New Mexico 87106; phone (505) 256-4065; fax (505) 256-4093; e-mail: [north.chuck@IHS.gov](mailto:north.chuck@IHS.gov).

### **Pediatric Child Care Conference April 21-23; Phoenix, Arizona**

All Indian child health providers are invited to sign up now for the 1999 IHS pediatric child care conference to be held in Phoenix, Arizona, April 21, 22, and 23. This year's conference promises to be the best ever, with outstanding national and local IHS expert consultants presenting strategies to deal with health problems of specific importance to our population: obesity and type 2 diabetes, injuries, violence prevention, pediatric gynecology, child death review teams, infectious diseases, breast feeding, child sexual abuse, adolescent psychiatry, and dysmorphology, among many others. As in 1997, mornings will be devoted to plenary sessions, and there will be three afternoon workshop sessions. The number of workshops has been increased to four each session, with each repeated once, so there will be 12 outstanding workshops to choose from in all! There will be opportunities to socialize with colleagues and families at an evening reception April 21.

The IHS Clinical Support Center is the accredited sponsor of this course. The Clinical Support Center is accredited by the Accreditation Council for Continuing Medical Education to sponsor continuing medical education for physicians. The CSC designates this activity for 17 hours of Category 1 credit towards the Physician's Recognition Award of the American Medical Association.

To register, contact Dorothy Meyer, CNM, Phoenix Area IHS, Room 504, Two Renaissance Square, 40 North Central Avenue, Phoenix, Arizona 85004; phone (602) 364-5175; fax (602) 364-5025. A block of rooms has been reserved until the end of March at the conference site, the Ramada Valley Ho, in Scottsdale, Arizona; phone (800) 321-4952; fax (602) 994-5355. Although tuition is free, each participant is responsible for his or her own travel arrangements. Enrollment is limited to the first 90 registrants. Don't miss out – contact us today to let us know that you're coming!

### **IHS Research Conference April 26-28, 1999; Albuquerque, New Mexico**

The Eleventh Annual Indian Health Service (IHS) Research Conference, sponsored by the IHS Research Program and the IHS Clinical Support Center (the accredited sponsor) will be held April 26-28, 1999 in Albuquerque, New Mexico. Papers were invited for oral or poster presentation in the following categories: Aging, AIDS, Alcohol and Substance Abuse, Cancer, Cardiovascular Disease, Diabetes, Environmental Health, Epidemiology, Health Care Administration, Health Promotion and Disease Prevention, Health Services Research, Injury Prevention, Mental Health, Nutrition, Oral Health, and Women's Health. Research that measures the effectiveness of innovative environmental health or health care interventions, or that involves exemplary partnerships between researchers and tribes, is especially welcome. The theme of the first day's seminar will be environmental

---

health in a community context.

For registration information, contact Ms. Linda Arviso-Miller at (505) 248-4142; fax (505) 248-4384; or e-mail [linda.arviso-miller@mail.ihs.gov](mailto:linda.arviso-miller@mail.ihs.gov).

### **Project Making Medicine May 1999; Oklahoma City, Oklahoma**

*Project Making Medicine* is recruiting Indian Health Service and tribal mental health providers and substance abuse counselors from the Bemidji, Aberdeen, Albuquerque, and Portland IHS Areas to attend specialized training in the treatment of physically and sexually abused Native American children.

The Center on Child Abuse and Neglect at the University of Oklahoma Health Sciences Center, through funding from the National Center on Child Abuse and Neglect and the Indian Health Service, Mental Health Division, has established a training program to provide specialized training to IHS and tribal mental health professionals in the treatment of child physical and sexual abuse. The purpose of *Project Making Medicine* is to increase the number of mental health providers available to serve child victims, using a "train the trainer" model. Upon acceptance into the training program, each enrollee will receive forty hours of training in treatment of child physical and sexual abuse, forty hours of training in clinical supervision and consultation, ongoing follow-up phone consultation, and one on-site visit. The program requires at a minimum a 12-month training obligation, and each person selected must make a commitment to implement a similar program at their site that will offer training, specialized treatment, and consultation.

The training is specific to Native American populations and the unique characteristics of tribal communities. Core and Consulting Faculty include traditional native healers and clinical and counseling child psychologists who have expertise in treatment and prevention of child maltreatment in Native American communities.

Funding was established for approximately sixty mental health professionals from the twelve IHS Areas to be trained over the three year period of the project (1998-2000). Each year the IHS will select twenty professionals from four IHS Areas to participate in the training. Licensed tribal and IHS mental health professionals (PhD, LMSW, LPC) are encouraged to contact their respective IHS Mental Health Branch Chief to be considered as a nominee. Certified alcohol and drug abuse counselors who work with adolescents may also be considered.

The initial application consists of 1) a letter of intent from the applicant that includes the commitment to provide specialized services to Native American children for at least two years following completion of training; 2) a letter of commitment from their immediate supervisor stating that the applicant will be allowed to participate in the training for the duration of the program and will be supported in the requirements as outlined

above; 3) a letter of support from the tribe or IHS agency stating the applicant will be allowed to participate in the training for the duration of project, that the agency supports the requirements as outlined above, and the agency will sponsor a *Project Making Medicine* on-site visit; 4) a copy of the applicant's current license; and 5) a *curriculum vitae*.

The initial training for the next cycle will be held in May and October of 1999 in Oklahoma City, OK. The deadline for applications is March 1, 1999.

For additional information regarding *Project Making Medicine*, please contact Dolores Subia BigFoot, PhD, or Sonja Atetewuthtakewa at 405-271-8858; or e-mail: [dee-bigfoot@ouhsc.edu](mailto:dee-bigfoot@ouhsc.edu).

### **Psychosocial Issues and Problems of Comorbidity for Native American Clients with Substance Abuse Problems June 2-4, 1999; Albuquerque New Mexico**

This conference is cosponsored by the Native American Research and Training Center (NARTC) at the University of Arizona, the University of Colorado School of Medicine's Division of American Indian and Alaskan Native Programs, and the Indian Health Service Alcohol and Substance Abuse Program. The conference addresses the issue of comorbidity and the problems associated with diagnosis, treatment, and aftercare for Indian clients with substance abuse problems.

The conference is open to health and human services providers, substance abuse program workers, vocational rehabilitation counselors, and tribal leaders. For more information or to register, call Jana or Jim at NARTC at (520) 621-5075.

### **Physician Assistant and Advanced Practice Nurse Meeting (Formerly known as the "Midlevel Meeting") June 7-11, 1999; Phoenix, Arizona**

**(Note the date change from that posted in the November issue of *The Provider*.)**

This conference for physician assistants, nurse practitioners, certified nurse midwives, certified registered nurse anesthetists, and pharmacist practitioners employed by the Indian Health Service or Indian health programs will offer 20 hours of discipline-specific continuing education designed to meet the needs of those providing primary care to American Indians and Alaska Natives. Note the date change from the November announcement in *The IHS Provider*. An agenda will be available soon. This year there will be a business meeting June 7-8 open to all advanced practice nurses, before the beginning of the continuing education portion of the meeting, which will start at 1 pm on Tuesday, June 8. Additionally, there will be a CE track for certified registered nurse anesthetists during the entire conference. There will be a registration fee of \$150 for those employed by compacting tribes or those in the private sector. For additional information, contact the IHS Clinical Support Center, 1616 East Indian School Road, Suite 375, Phoenix, Arizona 85016; phone (602) 640-2140.

---

### American Indian Elders . . . Following Their Ways August 3-5, 1999; Oklahoma City, Oklahoma

With a theme of "aging successfully through life's journey," this conference celebrates the International Year of the Older Person, with an emphasis on American Indian Elders. It is sponsored by the Lawton Indian Hospital, the Oklahoma Area IHS, the South West Area Health Education Center, the IHS Elder Care Initiative, and the IHS Clinical Support Center (the accredited sponsor). The target audience includes

consumers (elders) and health care providers (nurses, physicians, midlevel providers, social workers, community health workers, etc.). Its goals are to provide up-to-date information about elder health care, develop elder health care teams at Indian Health Service, tribal, and urban program sites, discuss rural health issues, and identify and promote access to resources. For more information, contact Diana Parish-Larocque at (580) 353-0350, ext. 246; or e-mail at [dlarocque@smtpl.ihs.gov](mailto:dlarocque@smtpl.ihs.gov).

---

### 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 appropriate documentation directly to the NCME.

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

#### NCME #743

**Clinical Management of Burns (50 minutes).** Thermal, electrical, or chemical burn injuries can happen quickly and unexpectedly - often with devastating consequences. Regardless of the patient's age, the physical and psychological trauma can

be immense. From minor burns that can be treated in primary care practice, to moderate and severe burns requiring emergency care or a qualified burn center, this program presents clear guidelines for successful, team-oriented management.

#### NCME #744

**Consultations in Dermatology: Identifying and Treating Skin Abnormalities (60 minutes).** The human skin is engaged in a lifelong battle with ultraviolet light, allergens, toxins, and side effects of medications. The consequences may include premalignant and malignant lesions, contact dermatitis, and drug eruptions. This video features clinical pictures of skin conditions that may be seen in primary care practice, and offers sound advice for accurate diagnosis and effective treatment. The critical role of prevention is also addressed.

---

### 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 (1-800-272-47887) 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.

Iwaniec UT, Crenshaw TD, Schoeninger MJ, Stout SD, Erickson MF. Methods for improving the efficiency of estimating total osteon density in the human anterior mid-diaphyseal femur. *American Journal of Physical Anthropology*. 107(1):13-24, 1998 Sep. 98411014

Hanson RL, Ehman MG, Pettitt DJ, Prochazka M, Thompson DB, Timberlake D, Foroud T, Kobes S, Baier L, Burns DK, Almasy L, Blangero J, Garvey WT, Bennett PH, Knowler WC.

- Autosomal genomic sc for loci linked to type II diabetes mellitus and body-mass index in Pima Indians. *American Journal of Human Genetics*. 63(4):1130-8, 1998 Oct. 98431798
- Hill JO. Genetic and environmental contributions to obesity [editorial; comment]. *American Journal of Clinical Nutrition*. 68(5):991-2, 1998 Nov. 99023396
- Fox CS, Esparza J, Nicolson M, Bennett PH, Schulz LO, Valencia ME, Ravussin E. Is a low leptin concentration, a low resting metabolic rate, or both the expression of the "thrifty genotype"? Results from Mexican Pima Indians [see comments]. *American Journal of Clinical Nutrition*. 68(5):1053-7, 1998 Nov. 99023408
- Canto JG, Taylor HA Jr, Rogers WJ, Sanderson B, Hilbe J, Barron HV. Presenting characteristics, treatment patterns, and clinical outcomes of non-black minorities in the National Registry of Myocardial Infarction 2. *American Journal of Cardiology*. 82(9):1013-8, 1998 Nov 1. 99032411
- McWhorter JH, Davis RB. Cherokee prescriptions for accupressure and massage. *North Carolina Medical Journal*. 59(6):368, 1998 Nov-Dec. 99046065
- Dean HJ, Young TK, Flett B, Wood-Steim P. Screening for type-2 diabetes in aboriginal children in northern Canada [letter]. *Lancet*. 352(9139):1523-4, 1998 Nov 7. 99036193
- Gray N. Addressing trauma in substance abuse treatment with American Indian adolescents. [Review] [42 refs] *Journal of Substance Abuse Treatment*. 15(5):393-9, 1998 Sep-Oct. 98423571
- Nadel B, Tang A, Lugo G, Love V, Escuro G, Feeney AJ. Decreased frequency of rearrangement due to the synergistic effect of nucleotide changes in the heptamer and nonamer of the recombination signal sequence of the V kappa gene A2b, which is associated with increased susceptibility of Navajos to Haemophilus influenzae type b disease. *Journal of Immunology*. 161(11):6068-73, 1998 Dec 1. 99049836
- Pueschel SM. Do Olmec figurines resemble children with specific dysmorphology syndromes?. *Journal of the History of Medicine & Allied Sciences*. 53(4):407-15, 1998 Oct. 99033608
- Shields ED. Does a parasite have a better chance of survival if Inuit or a Mayan spits on it? *Journal of Craniofacial Genetics & Developmental Biology*. 18(3):171-81, 1998 Jul-Sep. 99001401
- Deb P, KlempTA, O'Reilly RL, Singh SM. A single-primer PCR-based retroviral-related DNA polymorphism shared by two distinct human populations. *Genome*. 41(5):662-8, 1998 Oct. 99026965
- Fagot-Campagna A, Nelson RG, Knowler WC, Pettitt DJ, Robbins DC, Go O, Welty TK, Lee ET, Howard BV. Plasma lipoproteins and the incidence of abnormal excretion of albumin in diabetic American Indians: the Strong Heart Study. *Diabetologia*. 41(9):1002-9, 1998 Sep. 98425812
- Marlow E, Melkus GD, Bosma AM. STOP diabetes: educational model for Native American adolescents in the prevention of diabetes. *Diabetes Educator*. 24(4):441-3, 446-50, 1998 Jul-Aug. 99048640
- Harris SB, Meltzer SJ, Zinman B. New guidelines for the management of diabetes: a physician's guide. Steering Committee for the Revision of the Clinical Practice Guidelines for the Management of Diabetes in Canada. *CMAJ*. 159(8):973-8, 1998 Oct 20. 99051790
- Cobb N, Paisano RE. Patterns of cancer mortality among Native Americans [see comments]. *Cancer*. 83(11):2377-83, 1998 Dec 1. 99054273
- Burhansstipanov L. Cancer mortality among Native Americans [editorial; comment]. [Review] [17 refs] *Cancer*. 83(11):2247-50, 1998 Dec 1. 99054257
- Garro LC. On the rationality of decision-making studies: Part 2: Divergent rationalities. *Medical Anthropology Quarterly*. 12(3):341-55, 1998 Sep. 98419035
- Thomson R. Ages of mutations on a coalescent tree. *Mathematical Biosciences*. 153(1):41-61, 1998 Oct. 99027855
- Saewyc EM, Skay CL, Bearinger LH, Blum RW, Resnick MD. Sexual orientation, sexual behaviors, and pregnancy among American Indian adolescents. *Journal of Adolescent Health*. 23(4):238-47, 1998 Oct. 98434124
- TFK, Stivers DN, Foster MW, Chakraborty R, Howard RF, Milewicz DM, Arnett FC. Association of micro-satellite markers near the fibrillin 1 gene on human chromosome 15q with scleroderma in a Native American population. *Arthritis & Rheumatism*. 41(10):1729-37, 1998 Oct. 98449663
- Harley JB, Neas BR. Oklahoma Choctaw and systemic sclerosis: the founder effect and genetic susceptibility [editorial]. *Arthritis & Rheumatism*. 41(10):1725-8, 1998 Oct. 98449662



## Change of Address or Request for New Subscription Form

Name \_\_\_\_\_ Job Title \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

Worksite:  IHS  Tribal  Urban Indian  Other

Service Unit (if applicable) \_\_\_\_\_ Social Security Number \_\_\_\_\_

Check one:  New Subscription  Change of address

If change of address, please include old address, below, or attach address label.

Old Address \_\_\_\_\_

### 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: [the.provider@mail.ihs.gov](mailto:the.provider@mail.ihs.gov). Previous issues of *The Provider* (beginning with the February 1994 issue) can be found on the CSC Internet home page (<http://www.csc.ihs.gov>).

Wesley J. Picciotti, MPA ..... *Director, CSC*  
John F. Saari, MD ..... *Editor*  
Thomas J. Ambrose, RPh  
E.Y. Hooper, MD, MPH ..... *Contributing Editors*  
Cheryl Boshane ..... *Production Assistant*  
Erma J. Casuse, CDA ..... *Dental Assisting Training Coord.*  
Mary Beth Kinney, MPH, EdD ..... *Dental Ed. Spec.*  
M. Kitty Rogers, MS, RN-C ..... *Nursing Consultant*  
Edward J. Stein, Pharm D ..... *Pharmacy Consultant*

**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 and nursing 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.

Authors should submit at least 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 instructions.

Dept. of Health and Human Services  
Indian Health Service  
Clinical Support Center  
1616 East Indian School Road, Suite 375  
Phoenix, Arizona 85016

**BULK RATE**  
Postage and Fees Paid  
U.S. Dept. of Health & Human Services  
**Permit No. G-290**

ADDRESS CORRECTION REQUESTED

OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE \$300