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The Community Context of Domestic Violence: The Association of Pecking Order Violence with Domestic Violence

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Domestic Violence Screening in American Indians

Because violence has been recognized as a widespread public health threat in the United States, over the past ten years there has been an emphasis on the adoption of policies and procedures by health providers for the evaluation and treatment of domestic violence.^{1,2} Periodic review of these policies to monitor their effectiveness has also been encouraged.³ This is especially important for health care facilities that offer care for American Indians and Alaska Natives (AI/AN), because of the high rate of domestic violence in many AI/AN communities. According to the most recent statistics published by the U. S. Department of Health and Human Services, "American Indian/Alaska Native women were most likely to have been raped (34.1%), physically assaulted (61.4%), and stalked (17.0%) ..."⁴ than women of other ethnic origins.

Literature Review

Since the 1960s there has been much in the literature to explain domestic violence and how best to intervene to stop the pattern. Many of these theories address the reasons that an adult would allow herself to become a victim (although men can be victims of domestic violence, most victims are women). One of the most frequent explanations is that of "learned helplessness," which was derived from experiments with dogs.⁵ In the study, control dogs exposed to a shock would learn how to escape the shocks. However, in the experimental group, the dogs were harnessed so that they were unable to escape shocks given at unpredictable intervals for 24 hours prior to the experiment. When freed from the harness these dogs did not attempt to escape the shock, but rather endured long periods of high voltage shock.

This theory was applied to domestic violence because the victims come to realize that the violence is arbitrary and that there is little that they can do to alleviate the situation. Thus the victims become passive and prone to depression and anxiety, which immobilizes them more. This theory would lead to the conclusion that the more outside opportunities for relief offered to a victim, the less would be her chance of being trapped in a violent relationship. Thus, safe shelters, strong laws against violence, and assistance in setting up an independent home should be sufficient in encouraging women to leave an abusive partner.

A more expansive view of domestic violence that explains why women do not leave an abusive relationship, even when given the opportunity to do so, is a feminist theory that looks at social, historical, and economic variables that serve to support men in their need for control and power. Much of the literature on domestic violence in American Indian communities falls into this category. In 2000 Hamby⁶ focused on the many differences between tribes, including those tribes that practiced a

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matrilineal descent and others that had patrilineal descent. However, he concluded that the available evidence suggested that male authority, male restrictiveness, and socioeconomic stress were associated with domestic violence in most American Indian tribes.

In another study, Groginsky and Freeman⁷ traced back the abuse of Indian women and children to the introduction of alcohol, Christianity, and the European hierarchical family structure into Indian culture. However, they pointed out that the Western European criminal justice process did not assist Indian women in dealing with abusive relationships because Indian women may find it difficult to leave their families to enter a shelter. Furthermore, because Indian women do not easily express their feelings, it might be difficult for them to discuss their situation with others.

Besides theories like learned helplessness that explain the behavior of victims, and those theories that emphasize the contribution of a patriarchal social environment to domestic violence, a third line of inquiry looks at the psychological contribution of the victims in perpetuating domestic violence. In the literature looking at Native Americans, a study by Robin, Chester, and Rasmussen,⁸ which focused on a specific southwestern tribe, revealed a high rate of lifetime (91%) and recent (31%) intimate violence. This study pointed out that much of this behavior was interactive and could be best understood in an environmental context that included alcoholism, other psychiatric disorders, and traumatic events.

Another study on a southwestern tribe⁹ revealed similar high incidences of domestic violence, this one revealing that both women (75% of participants), and men (58% of participants) had been the victim of domestic violence in their most recent relationship. This study also found that depression and post traumatic stress disorder among women were related to domestic violence and male control over finances.

A third study,¹⁰ also on a southwestern tribe, looked at the importance of childhood abuse as a risk factor for conduct disorder; the impact of abuse and conduct disorder on alcohol abuse; and the combination of all three (childhood abuse, conduct disorder, and alcohol abuse) on the risk of becoming either a perpetrator or victim of domestic violence.

In her book, *Walking Victims: Understanding and Treating Abused Women Who Repeat the Cycle*, Adele Mayer, PhD,¹¹ offers explanations that seem to shed light on the experience of domestic violence in many American Indian communities. She categorizes women who are victims into four groups: 1) survivors of misfortune, 2) adult children of double-bind parents, 3) women with unresolved victim bonding, and 4) women with histories of early unresolved trauma. In each case she looks into the woman's personal history to determine how the woman became involved in domestic violence, and what therapeutic intervention could best be implemented to stop the cycle.

* * * * *

Survivors of Misfortune

These women stay in abusive relationships for long periods of time because the abuse progresses so slowly that the victim rationalizes and minimizes it. Often the culture she lives in condones violence and considers male aggression as normal. By the time she realizes her situation, she has economic considerations as well as the needs of the children to think about. But by the time the children are ready to leave home, the woman is employed and has achieved enough economic independence and an increased sense of self-worth that she will fare well following a divorce or separation from her husband. Therapies most effective in this situation are validation of the woman's experiences, and family sessions that address the children's concern that their father is being abandoned. If families desire marital counseling, measurable goals and objectives, as well as contracts to ensure adherence to goals, should be made. Limits need to be set concerning issues that involve all family members and those that involve only the adults.

Adult Children of Double-Bind Parents or Unintentional Game Players

Double-bind parents give mixed messages to their children, which causes the children to have trust issues, confusion regarding what is normal and what is not, and abandonment issues. The extreme result of double-bind parenting is the development of borderline personalities in the offspring. Examples of double-bind parenting are parents who tell the children how much the children mean to them, yet the parents are too busy with work and their social schedules to spend time with the children. Another example is the mother who ignores the molestation of her daughter by a stepfather. A third example is the alcoholic parent who makes promises to his or her children but does not keep those promises. As the child grows up, she has problems with trust, either trusting too easily or not at all. She has trouble distinguishing what is normal. This makes her vulnerable to abuse, because she has trouble gauging normal behavior either in herself or in others. She fears abandonment and yet sees relationships as conflicted and painful. Often these women become co-dependent, with a strong need to be needed. They seek out partners to rescue, mold, and fix. These women tend to be impulsive and self-destructive, manifested by eating disorders and self-mutilation.

Adult children of double-bind parents can make changes in their way of relating to partners, but only when they are motivated to make these changes, which usually comes in a crisis time, when they realize their pattern of unsuccessful relationships. Therapy involves educating the patient on the elements of a healthy functional relationship.

Women with Unresolved Victim Bonding or Intentional Game Players

These women have had a history of childhood sexual abuse during which period they identified with the offender rather than assume a victim role. Throughout adulthood the

abuse is replayed in order to gain control in a co-dependent relationship. As an adult she provokes rape and battery in order to satisfy her needs through the partner's resultant shame and guilt. She develops many of the attributes of an antisocial personality disorder by manipulating and objectifying others for her own ends. These women are impulsive, emotionally stuck at a young age, unable to sustain long-term relationships, and lacking guilt and remorse for her behavior.

Therapy is not often effective in these women because they don't suffer mentally from their actions. Sometimes if a woman realizes that the abuse she provokes may be life threatening, or if her children are removed from her she will become motivated to change. In that case therapy is directed to anger-management, and assistance in redirecting her energies and life-goals. These are similar therapies that have been used with some success in men who are the perpetrators of domestic violence.

True Victims or Women with Histories of Early Unresolved Trauma

As a result of extensive and early sexual, physical and emotional abuse, these women have poor self-esteem and an expectation of abuse from others. They develop enmeshed relationships with their partners, and are willing to sacrifice themselves and anything they may possess including their children. Therapeutic goals are limited, and these women may do best with a coordinated, inter-agency approach that includes alcohol or drug treatment, vocational rehabilitation, and parenting classes.

Methods

With these facts in mind, a small, rural IHS clinic, which serves a Native American community in the southwest United States, reviewed all screening for domestic violence that had taken place in the previous three years. This was compared with a running tally of all known episodes of domestic violence that had occurred during the same time frame on the reservation. Three significant patterns emerged from this review.

The first was the level of denial of domestic violence unless a crisis situation was occurring at the time of screening. The second was the strong association between domestic violence and child abuse. The third pattern to emerge was the relationship between domestic violence and "pecking-order" violence. Pecking-order violence takes place chiefly when an ex-boyfriend starts dating another women. Then friends and family members of the initial woman gang up to beat up the new girl friend. This takes place among men as well, with an increased level of violence, often involving vehicular assault.

In order to understand the importance of these trends, a series of in-depth interviews with local professionals as well as victims was undertaken. Since this is a community in which there are active institutions, such as Social Services, Victim's Services, and alcohol rehabilitation, that work with the clinic, these findings may be able to help reinforce or redirect their services and interactions.

The Domestic Violence Policy for this clinic recommends that all women who are seen for a first prenatal visit will be screened for both domestic violence and alcohol abuse. If either screen is positive, then the appropriate referral will be made immediately. Concurrently, at the weekly Performance Improvement meeting, a report of all known domestic violence, child abuse, or elder abuse is made. If not already done, appropriate referrals are made for these instances as well.

The screening questions for domestic violence are as follows:

1. Does your partner ever intimidate you by words, looks, or gestures?	Yes/No
2. Has your partner ever threatened to harm you, the children, or the pets, or to destroy any of your possessions?	Yes/No
3. Are you afraid to go home?	Yes/No
4. Has physical violence increased in severity over the past years?	Yes/No
5. Is alcohol or substance abuse also a problem?	Yes/No
6. Is there a gun in the house?	Yes/No
7. Are you afraid of your partner?	Yes/No

This questionnaire is either completed by the patient with paper and pen when she is alone, or is administered by the nurse, who then completes the form. The primary care provider reviews the screen and makes appropriate referrals. On-site resources include brochures about domestic violence that contain the phone numbers for the local hotline and the local victim's services, as well as a suggested safety plan and available legal interventions.

Results of Domestic Violence Screening

The results of the above screen for the fiscal years 1999-2000, 2000-2001, and 2001-2002 are as follows: of 64 women seen for a first prenatal visit, 63 were screened for Domestic Violence. Forty-six women (73%) screened responded "No" to all seven questions. Nine additional women (14%) responded that there was a gun in the house, chiefly for hunting. Three women (5%) responded that alcohol was a problem; one of them had circled both Yes and No to this question. Four women (6%) said that they had been intimidated by their partner's words, looks, or gestures. One woman reported that she was afraid to go home, that violence was increasing in severity, that there was a problem with alcohol and substance abuse, and that there was a gun in the house. Overall the screen identified five women (10%) with a history of domestic violence or battering in the current pregnancy.

During this same time frame, the weekly clinic meetings revealed 88 incidents of violence or child or elder neglect. These incidents were discovered by the clinic staff through patient visits, Emergency Medical System run reports, social services referrals, or police scanner reports. During the three-

year time frame encompassed from 1999 to 2002, the 88 incidents reported ranged from child and elder neglect, to two incidents of vehicular assault, to one homicide. Forty-five were intimate partner violence, 24 were child abuse, 7 were pecking-order beatings, 6 were elder abuse, and 6 were family violence (generally sibling assaults).

Comparison of Screening with Known Incidents

In comparing the prenatal screening tool with known incidents, it was remarkable that in several cases only when there was a concurrent episode involving police or the court system would the screen be positive. One woman in a known abusive relationship was screened three times. Only during the time when her husband was being arraigned in court for domestic violence did she have a positive screen. On the second pregnancy she only reported that alcohol and drugs were a problem, and on the third pregnancy she had a negative screen.

Comparison of Domestic Violence and Alcohol Abuse Screen

The domestic violence screen that we chose to use has not been tested and shown to be valid in American Indian populations. In order to evaluate its effectiveness with this population it was compared with the alcohol abuse screen performed at the same time. Of the 64 pregnant women screened, 19 denied ever having any problems with alcohol. Twenty-five reported that one or both parents had ever had alcohol problems, 12 responded that their partner had ever had alcohol or drug problems, and 7 admitted that they had alcohol or other drug use problems during this pregnancy. Twelve reported a tolerance of 5 or more drinks without passing out, 8 said that they had ever felt that they ought to cut down on their drinking and 6 reported amnesia due to drinking.

This comparison of the domestic violence screen with the alcohol screen revealed that the patients we care for are able to admit problems that they deal with, but that in general they deny that domestic violence is a problem. It also pointed out what a pervasive problem alcohol presents for this patient population.

In-Depth Interviews

In order to make sense of the patterns of abuse found in this community, in-depth interviews were conducted with the victims services counselor, a tribal woman physician, three clinic nurses, the head-start nurse, the tribal prosecutor, a member of the board of directors for the domestic violence hot line, five victims of domestic violence, and three clinic patients who had never personally experienced violence. The picture that emerged was one of a community-wide pattern of intimidation, which was worsened by alcohol and drug abuse. One person described an intimidating full-body up-and-down look, which is given to newcomers to help them understand their place in the pecking order. Several other people discussed the role of jealousy, and the effect of unstable intimate partner relationships. Men gain prestige from having multiple relationships,

and women express their anger at having been left by their significant other by ganging up against the new partner.

Some of the people interviewed referred to a historical male dominance, pointing out that women traditionally did not own property. One of the elders was quoted as saying that the day belonged to the women but the night belonged to the men. Many of those interviewed reported having seen domestic violence in their parents' and grandparents' generations. One woman reported that she had gone from a strict father to an even stricter "father" – her husband.

A number of the professionals and patients pointed out the effects of domestic violence on the children. One woman said that it was her six-year-old daughter who called 911 the last time her husband beat her. She reported that her daughter is now in counseling because of the aggressive behavior she displayed against her two-year-old brother. Two other women talked about their teenage sons' battles with depression and suicidal ideation. The Head Start nurse described the fitful sleep patterns and aggressive play in 18-month-olds to 4-year-olds. One 4-year-old had already internalized the behavior of angry outbursts followed by an elaborate pattern of making up with the victim. Yet other children were noted to withdraw, demonstrate scattered or decreased attention, or cry more easily when stressful events were occurring at home.

Victims of domestic violence talked of influences that were helpful to them in breaking the cycle of violence. One, who had not grown up with domestic violence, said that it was the influence of a friend who had escaped a similar situation, which made her take steps to use the legal system. Another woman, who had grown up with violence, said that the questions from the staff in the clinic had first made her aware that the violence she lived with was not normal. A third victim said that while she was in a shelter arranged by tribal Victim's Services she felt lonely but safe for the first time. It was only when she returned to her husband that she realized how uncomfortable he made her feel.

Of the women who stayed with their abusing partners, one said that while he was on probation, he did not drink or abuse her. Although she did not like living with him, she did not feel she had any alternatives because the house was in his name and she still had three young children to raise. Another victim assured me that after her husband returned home from his second jail term for domestic assault, everything was fine.

Discussion

This study shows that 10% of women screened on their first prenatal visit admitted to a history of domestic violence or battering in the current pregnancy. This compares with an estimated 7-17% of all screened women in the United States admitting to abuse during the current pregnancy.¹² However, our response was low when compared to information from the weekly tally and from interviews from local residents that suggested that domestic violence is a prevalent problem.

This is also low compared to the number of women who admitted that alcohol was a problem in their families, 27

women, or 58% of respondents. This lack of disclosure may be because of the shame involved with domestic violence, or the fact that the respondents may have been worried about confidentiality. The fact that several respondents only revealed domestic violence when they were in the midst of a recognized incident for which they were already receiving assistance may point out that they did not feel safe revealing the problem before it was being handled in the courts. These are all issues that must be investigated more thoroughly.

Injury Prevention Programs

From the literature and from in-depth interviews, it appears that domestic violence occurs in a context of widespread violence including child abuse and pecking order violence. It is multi-generational and is now effecting a new generation of children. The psychological literature reveals that many victims of domestic violence are hard to assist because of the ways in which they have internalized trauma that occurred to them as children.

A promising approach to domestic violence has appeared in the safety literature contributed by Injury Prevention Specialists in the Indian Health System. As described in a 1999 article,¹³ the components of such a program include maintenance of a community-based severe injury surveillance system; development of comprehensive, community-based coalitions to develop interventions, and consultation and training by technical experts in injury prevention. For example, in one community it was noted that most assaults occurred during the evening hours on Saturday and Sunday.¹⁴ Specific interventions recommended included weekend saturation patrols and DUI checks, and increasing awareness about and planning of alternative community activities during weekends. Another intervention could involve firearms, since firearm-related deaths among American Indians accounted for 11.3% of all injury deaths, making firearms the second leading cause of injury death after motor vehicles.¹⁵

Conclusion

Although the prenatal screening program in this clinic in and of itself did not turn up a substantial number of new cases of domestic assault, it served the purpose of emphasizing the abnormal nature of violence and intimidation in an intimate relationship. Furthermore, it serves as the basis of the epidemiological survey that is the first step in an injury prevention program. In bringing to light the strong denial that exists among women about the existence of domestic violence, the screen serves to point the direction in which interventions should be aimed. An initial awareness campaign about the pervasive nature of violence in this community should be the first step.

Next, a multifaceted, community-based approach, which would involve all the departments already caring for domestic violence victims, should be coordinated. This program would depend on a surveillance system of data that could be used to target high-risk groups, set program priorities, and evaluate the

effectiveness of intervention programs. It would require tribal leaders who are engaged and supportive. It would need community support for the police and legal system in enforcing family violence laws. It would involve a close working relationship between local health providers and victims' services. It would also involve including sessions in the alcohol treatment programs on domestic violence, as well as including parenting classes in the treatment plans for victims and perpetrators.

Information on domestic violence should also be part of the patient information provided at routine prenatal and well-child clinic visits. Repeated screening for domestic violence in each trimester has been shown to produce a higher yield of positive responses,¹⁶ so the clinic could add a second screen to assess if safety concerns have changed.

The personnel and expertise are already present in this community. What remains to be done is to combat the denial surrounding the issue of violence, so that the significance and duration of its devastating effects on the community are acknowledged. The rest is a matter of establishing priorities. □

References

1. Flitcraft AH, Hadley SM, Hendricks-Matthews MK, et al. American Medical Association diagnostic and treatment guidelines on domestic violence. *Arch Fam Med*. Vol.1, Sept 1992.
2. Haack D. Suggested Protocols for Victims of Spousal and Elder Abuse. Colorado Department of Health. July, 1992.
3. Clark D. Scratching the Surface: Evolving Domestic Violence Screening in One Service Unit. *The IHS Primary Care Provider*. March 2002.
4. Maternal and Child Health Bureau. Women's Health USA 2002. Health Resources and Services Administration. U.S. Department of Health and Human Services.
5. Seligman MEP. *Helplessness: On Depression, Development, and Death*. San Francisco: W.H. Freeman; 1975.
6. Hamby SL. Domestic violence - adult women. *American Journal of Community Psychology*. 2000 Vol. 28 (5).
7. Groginsky L, and Freeman C. Domestic Violence in Native American Indian and Alaskan Native communities. *Protecting Children*. 1995;Vol.11,Issue 3:13-16.
8. Robin RW, Chester B, Rasmussen JK. Intimate violence in a southwestern American Indian tribal community. *Cultural Diversity & Ethnic Minority Psychology*. 1998;4(4):335-344.
9. Hamby SH, Skupien MB. Domestic violence on the San Carlos Apache Reservation: Rates, associated psychological symptoms, and current beliefs. *The IHS Primary Care Provider*. 1998;Vol. 23, No.8.
10. Kunitz SJ, Levy JE, McCloskey J, Gabriel KR. Alcohol dependence and domestic violence as sequels of abuse and conduct disorder in childhood. *Child Abuse & Neglect*. 1998;Vol.22(11).
11. Mayer A. *Walking Victims: Understanding and Treating Abused Women Who Repeat the Cycle*. Holmes Beach, Florida: Learning Publications; 1997.
12. Norton LB, Peipert JF, Zierler S, et al. Battering in pregnancy: An assessment of two screening methods. *Obstetrics & Gynecology*, March 1995;Vol.85, No.3:321-325.
13. Kuklinski DM, Buchanan CB. Assault injuries on the Hualapai Indian Reservation: A descriptive study. *The IHS Primary Care Provider*. April 1997;Vol.22, No.9.
14. Smith RJ, Handler AO. The role of firearms in American Indian deaths. *The IHS Primary Care Provider*. July 1997;Vol.22, No.7.
15. McFarlane J, Parker B, Soeken K, Bullock L. Assessing for abuse during pregnancy: Severity and frequency of injuries and associated entry into prenatal care. *JAMA*. 1992; 267:3176-8.

In April 2001 the Indian Health Service (IHS) National Epidemiology Program began collaborating with a taskforce from the National Network of STD/HIV Prevention Training Centers (PTCs) to address sexually transmitted disease (STD) training needs among providers working at IHS, tribal and urban program sites. The PTCs are a Centers for Disease Control and Prevention (CDC) funded group of regional centers created in partnership with health departments and universities to serve specific regions across the country.

The PTCs are dedicated to increasing the knowledge and skills of health professionals in the areas of sexual and reproductive health. The entire network includes ten Clinical Training Centers, four Behavioral and Social Intervention Training Centers and four Partner Services and Program Support Training Centers located throughout the United States. To learn more about training available through the National Network of STD/HIV Prevention Training Centers, visit our national website at <http://stdhivpreventiontraining.org>. The California PTC has been leading this collaboration with IHS along with the Dallas, Denver, Cincinnati, and Seattle PTCs. As part of this collaboration, the IHS/PTC taskforce will be providing articles with STD-related updates in the IHS Primary Care Provider

This current article will address the CDC 2002 STD treatment guidelines. These guidelines were released in May 2002, the first time these evidence-based guidelines have been revised since 1998. This article will highlight the major changes called for by the new guidelines. While the text of this article will not address treatment recommendations that have remained the same from the 1998 guidelines, a two-page summary table of the treatment recommendations can be found following this article. This summary table was developed by the California PTC for treatment in Federal Region IX, excluding California (a separate treatment guideline summary for California can be found at: http://www.stdhivtraining.org/pdf/Txguidln2002_9-23.pdf). While this summary table was developed for use within Federal Region IX, it is applicable in other regions. Region II summary tables of the 2002 treatment guidelines can be found at: <http://www.ci.nyc.ny.us/html/doh/pdf/std/treat1.pdf>. The entire 2002 Treatment Guidelines and links to order the CDC's wall chart summary table and pocket guide of treatment recommendations can be found at <http://www.cdc.gov/std/treatment>.

New 2002 STD Treatment Guidelines

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Prevention of STDs

The 2002 guidelines encourage health care providers to focus on risk assessment and counseling, in addition to the clinical aspects of STD control, screening, and treatment. Providers are encouraged to use client-centered counseling approaches. In particular, under the new *men who have sex with men* (MSM) section, risk assessment of all male patients is recommended. In addition, the guidelines note that clients seeking an STD evaluation should be informed about the specific tests that will be performed as part of their evaluation. Clients also should receive information about actions necessary to avoid acquisition or transmission of STDs.

Recent studies have shown that nonoxynol-9 (N-9), a commonly used spermicidal contraceptive, can cause genital lesions in the vagina and may damage the lining of the rectum, increasing the risk of HIV transmission. Therefore, the new

guidelines recommend that spermicides, especially those that contain N-9, should not be used for STD and HIV prevention or for use during anal intercourse; condoms lubricated with N-9 are more expensive and offer no additional protection, so are no longer recommended.

Men Who Have Sex With Men

The new STD guidelines recommend annual screening for STDs, including HIV, chlamydia (anal and urethral), syphilis, and gonorrhea (anal, pharyngeal, and urethral), as well as vaccination against hepatitis A and B. If patients report multiple anonymous partners, or sex in conjunction with illicit drugs, they should be screened at 3 to 6 month intervals.

Pregnant Women

It is now recommended that all pregnant women be screened for chlamydia at the first prenatal visit. For those women at higher risk of chlamydia (less than 25 years of age or if they report new or multiple partners), a second chlamydia screening test should be obtained at the beginning of the third trimester.

Women who have had a preterm delivery should be screened for bacterial vaginosis during the first trimester of any subsequent pregnancies. However, routine screening of all pregnant women for either bacterial vaginosis or trichomoniasis is not recommended.

Chlamydia

The CDC has expanded its recommendation for chlamydia screening among younger women. Providers should annually screen sexually active adolescent girls (19 years and younger) and young adult women (20 to 25 years old). All women with chlamydia infections should be rescreened three to four months after treatment is completed, or whenever they next present for care, since reinfection confers an elevated risk for pelvic inflammatory disease. The recommended regimens for chlamydia treatment in nonpregnant adults and adolescents remain: azithromycin 1 gm as a single dose; and doxycycline 100 mg orally twice a day for 7 days. Levofloxacin 500 mg orally for 7 days has been added as an alternative regimen.

Gonorrhea

The guidelines address the increase in quinolone-resistant gonorrhea and recommend that fluoroquinolones should not be used to treat infections acquired in Asia, the Pacific Islands, Hawaii, or California. For infections acquired in areas other than Asia, the Pacific Islands, Hawaii, or California, the guidelines have added levofloxacin 250 mg orally in a single dose to the recommended regimens for uncomplicated gonorrhea treatment. In areas where fluoroquinolone gonorrhea resistance is a concern, the guidelines (developed by the California Department of Health Services) to consider are as follows:

1. Avoid the use of fluoroquinolones (ciprofloxacin, ofloxacin, and levofloxacin) to treat gonorrhea.
2. Instead, antibiotics of choice to treat uncomplicated gonococcal infections of the cervix, urethra, and rectum include:
 - Ceftriaxone 125 mg intramuscularly in a single dose, or
 - Cefixime 400 mg orally in a single dose (if available).
3. The antibiotic of choice to treat gonococcal infections of the pharynx:
 - Ceftriaxone 125 mg intramuscularly in a single dose
 - Cefixime is not recommended by the CDC to treat pharyngeal infections because of a relative lack of published data demonstrating efficacy. However, providers may choose cefixime because of the ease of oral administration. If cefixime is used to treat pharyngeal infection, a test-of-cure (TOC)¹ is recommended.

¹ Ideally, the test-of-cure should be a culture test so that the isolate can be tested for antimicrobial susceptibility. If a non-culture test is used for test-of-cure, positive results should be followed up with a culture and susceptibility testing before the patient receives an alternative treatment

4. For patients with significant anaphylaxis-type (IgE-mediated) allergies to penicillin, where the use of cephalosporins is a concern, or for patients with allergies to cephalosporins:
 - Spectinomycin 2 gm intramuscularly in a single dose, or
 - Fluoroquinolone with test-of-cure (TOC)¹, or
 - Azithromycin 2 gm orally in a single dose, with test-of-cure (TOC)¹
5. For the treatment of pelvic inflammatory disease (PID), the CDC guidelines should be followed. However, if the gonorrhea test is positive in a patient receiving a fluoroquinolone regimen, a test-of-cure (TOC)¹ should be performed.
6. Co-treatment of chlamydia for patients with gonorrhea is still recommended unless chlamydia infection has been ruled out using sensitive test technology (e.g., nucleic acid amplification test, or NAATs). Recommended antibiotics for the treatment of chlamydial infection include:
 - Azithromycin (1 gm orally in a single dose), or
 - Doxycycline (100 mg orally twice a day for 7 days).

Clinicians need to be alert to the failure of any patient to respond to any recommended therapy. If, after a recommended regimen, clinicians encounter a treatment failure in the absence of reexposure, they need to take necessary steps to culture the organism and send the isolate to a lab where susceptibility testing can be performed.

Pelvic Inflammatory Disease

The guidelines recommend empiric PID treatment if the minimum diagnostic criteria of uterine/adnexal tenderness or cervical motion tenderness are found in a young sexually active female. The presence of white blood cells on saline microscopy of vaginal secretions has been added to the additional criteria that may be used to support the diagnosis of PID.

The new guidelines add levofloxacin, 500 mg po or IV once daily for 14 days as a recommended regimen that can be used instead of ofloxacin if necessary. However, in fluoroquinolone resistant gonorrhea areas, if gonococcal PID is documented, and fluoroquinolones were used for PID treatment, then a TOC¹ is recommended to rule out resistant gonorrhea infection. All of the oral PID regimens (ofloxacin or levofloxacin or cephalosporin plus doxycycline) and the parenteral regimen "A" (ofloxacin or levofloxacin) have the option of "with-or-without" metronidazole for 14 days in the guidelines. The lack of anaerobic coverage with ofloxacin or levofloxacin is a concern; adding metronidazole to the fluoroquinolone PID regimens is recommended by the authors of this review. However, with the cephalosporin and doxycycline regimen, especially if cefoxitin is used, the added value of metronidazole is unclear.

Vaginal Infections

The guidelines stress that in treating trichomoniasis, metronidazole gel is ineffective and should not be used. The only recommended regimen is oral metronidazole. However, if infections are nonresponsive to therapy, providers should consult with the CDC to obtain resistance testing kits (phone: (770) 488-4115), or for a clinical consult (phone: (404) 639-8363) because of concerns about emerging metronidazole-resistant trichomoniasis in the United States. Pregnant women with symptomatic trichomoniasis can be treated with a single 2 gm dose of metronidazole. Studies have not shown a consistent association between metronidazole use in pregnancy and teratogenic or mutagenic effects in infants.

Prior to abortions, hysterectomies, or other invasive procedures, providers should consider screening and treating for bacterial vaginosis to reduce infections and complications. The guidelines conclude that clindamycin regimens are somewhat less effective than metronidazole regimens for bacterial vaginosis treatment. When prescribing metronidazole gel, dosing should be changed from two times a day to daily. Clindamycin ovules 100 gm intravaginally for 3 days has been added as an alternative regimen for non-pregnant women. Recommended regimens for treatment of bacterial vaginosis during pregnancy are metronidazole 250 orally three times a day for 7 days or clindamycin 300 mg orally twice a day for 7 days. Follow-up one month after completion of treatment should be considered to assess treatment efficacy.

The guidelines provide a distinction between complicated and uncomplicated vulvovaginal candidiasis (VVC). For uncomplicated VVC, butoconazole sustained-release intravaginal preparation as a single application has been added to the recommended regimen. Vaginal cultures should be obtained in women with recurrent VVC (RVCC; defined as four or more symptomatic episodes each year) to confirm diagnosis and to identify species.

Each individual episode of RVCC caused by *Candida albicans* should be treated with 7 to 14 days of topical therapy; or a 150 mg oral dose of fluconazole repeated 3 days later to achieve mycologic remission before initiating a maintenance antifungal regimen. Recommended regimens for maintenance should be continued for six months, and include clotrimazole (500 mg dose vaginal suppositories once weekly), ketoconazole (100 mg dose once daily), fluconazole (100-150 mg dose once weekly), and itraconazole (400 mg dose once monthly or 100mg dose once daily).

For non-albicans VVC, the first-line therapy should be longer (7 to 14 days) with a non-fluconazole azole drug. If there is recurrence, 600 mg of boric acid in a gelatin capsule is recommended, administered vaginally once daily for 2 weeks. Another option is flucytosine; however, referral to a specialist is advised. For continued recurrence of non-albicans VVC, a maintenance regimen of 100,000 units of nystatin delivered daily via vaginal suppository has been successful.

Syphilis

Azithromycin 2 gm in a single oral dose or ceftriaxone 1 gm IV/IM daily for 8 to 10 days has been added after doxycycline and tetracycline as a possible alternative therapy for early syphilis in non-pregnant penicillin-allergic patients, but the importance of clinical and serologic follow-up is stressed because efficacy data are limited; also, use of alternative therapy in HIV-positive patients has not been studied.

Patients with serofast non-treponemal tests in early syphilis and a normal CSF should be retreated with Benzathine Penicillin G 2.4 mu times 3 (at 1-week intervals). After this treatment, if the serologic titer remains serofast, no further intervention is warranted unless the titer has a sustained four-fold increase for longer than two weeks. These patients should be followed with a serologic test for syphilis on an annual basis to ensure that the serofast titer does not increase.

In latent infection, some experts recommend a CSF examination for patients with non-treponemal titers $\geq 1:32$. For patients treated with 3 doses of Benzathine Penicillin for late latent or syphilis of unknown duration an interval between doses that does not exceed 10 to 14 days (rather than the recommended 7-day interval) may be acceptable in non-pregnant patients.

A new alternative treatment for non-pregnant neurosyphilis patients with a non-IgE mediated penicillin allergy is ceftriaxone 2 gm IV/IM once daily for 10 to 14 days. Again, because data on efficacy are limited, close follow-up is essential; its use in HIV-positive patients has not been well studied. For neurosyphilis some experts recommend additional treatment with Benzathine penicillin G 2.4 mu times 3 (1-week intervals) after completion of 10 to 14 days of IV or IM therapy.

Herpes

New serologic testing procedures may help providers diagnose and manage herpes simplex virus (HSV)-1 and HSV-2. Type specific HSV serologic testing that accurately distinguishes between HSV-1 and HSV-2 are commercially available; however, some older assays that do not distinguish HSV-1 from HSV-2 remain on the market. The new guidelines include an expanded discussion of male condoms, transmission risk, type-specific serologic testing, and the risk of neonatal infection in pregnant women.

Better-defined doses of acyclovir to use in HIV-infected patients have been added to these guidelines. Recommended regimens for episodic therapy of recurrent infection in HIV-positive individuals include acyclovir 200 mg five times a day, or 400 mg three times a day for 5 to 10 days, or famciclovir 500 mg two times a day for 5 to 10 days, or valacyclovir 1 gm two times a day for 5 to 10 days. For daily suppressive therapy in HIV-positive individuals, acyclovir 400 to 800 mg two or three times a day, famciclovir 500 mg two times a day, or valacyclovir 500 mg two times a day are recommended. HIV-infected persons with poor response to therapy should have their isolates tested for anti-viral resistance.

The neonatal herpes treatment recommendations have been changed to acyclovir 20 mg/kg IV q 8 for 21 days for disseminated and central nervous system (CNS) disease and 14 days for disease limited to skin and mucous membranes.

Genital Warts

The new guidelines include a new emphasis on education and counseling, and recommend that providers educate patients that condoms may provide only limited protection. Podophyllin resin has been removed as a recommended treatment for vaginal warts but podofilox and imiquimod have been added for distal meatal warts. The guidelines note that observation is an acceptable alternative to treatment in some patients as genital warts may spontaneously resolve, and there is uncertainty about the effect of treatment on transmission. Human papillomavirus (HPV) nucleic acid testing may be useful in the triage of women with atypical squamous cells of undetermined significance (ASCUS) pap tests. While some experts have been screening HIV infected MSM for anal squamous intraepithelial lesions (SIL) by cytology, the guidelines do not recommend such an approach at this time, as efficacy and optimal management are unclear.

Sexual Assault

Chlamydia nucleic acid amplification tests (NAATs) may now be used as a test for legal evidence in adults and adolescents. These should be confirmed with a second Food and Drug Administration (FDA) approved NAAT with a different chlamydia nucleic acid target. In children, chlamydia NAATs may be used as alternative tests for legal evidence if chlamydia culture is not available, but confirmation with a second FDA-approved NAAT that targets a different sequence is essential. Post-exposure prophylaxis should be considered in cases in which the risk of HIV exposure in the assault appears to be significant. □



REGION IX STD TREATMENT GUIDELINES FOR ADULTS AND ADOLESCENTS 2002 (EXCLUDING CALIFORNIA)

These guidelines for the treatment of patients with STDs reflect the 2002 CDC STD Treatment Guidelines and the Region IX Infertility Clinical Guidelines. The focus is primarily on STDs encountered in office practice. These guidelines are intended as a source of clinical guidance; they are not a comprehensive list of all effective regimens. To report STD infections; request assistance with confidential notification of sexual partners of patients with syphilis, gonorrhea, chlamydia or HIV infection; or to obtain additional information on the medical management of STD patients, call the local health department.

DISEASE	RECOMMENDED REGIMENS	DOSE/ROUTE	ALTERNATIVE REGIMENS
CHLAMYDIA			
Uncomplicated Infections Adults/Adolescents ¹	<ul style="list-style-type: none"> • Azithromycin or • Doxycycline² 	1 g po 100 mg po bid x 7 d	Erythromycin base 500 mg po qid x 7 d or Erythromycin ethylsuccinate 800 mg po qid x 7 d or Ofloxacin ² 300 mg po bid x 7 d or Levofloxacin ² 500 mg po qd x 7 d
Pregnant Women ³	<ul style="list-style-type: none"> • Azithromycin or • Amoxicillin or • Erythromycin base 	1 g po 500 mg po tid x 7 d 500 mg po qid x 7 d	Erythromycin base 250 mg po qid x 14 d or Erythromycin ethylsuccinate 800 mg po qid x 7 d or Erythromycin ethylsuccinate 400 mg po qid x 14 d
GONORRHEA^{4,5}			
Uncomplicated Infections Adults/Adolescents	<ul style="list-style-type: none"> • Cefixime⁶ or • Ceftriaxone or • Ciprofloxacin^{2,7} or • Ofloxacin^{2,6,7} or • Levofloxacin^{2,6,7} 	400 mg po 125 mg IM 500 mg po 400 mg po 250 mg po	Spectinomycin ⁶ 2 g IM
Pregnant Women	<ul style="list-style-type: none"> • Ceftriaxone or • Cefixime⁶ 	125 mg IM 400 mg po	Spectinomycin ⁶ 2 g
PELVIC INFLAMMATORY DISEASE^{4,5,8}	Parenteral⁹ <ul style="list-style-type: none"> • Either Cefotetan or Cefoxitin plus Doxycycline² or • Clindamycin plus Gentamicin Oral Treatment/IM <ul style="list-style-type: none"> • Either Ofloxacin² or Levofloxacin² plus Metronidazole or • Either Ceftriaxone or Cefoxitin with Probenecid plus Doxycycline² 	2 g IV q 12 hrs 2 g IV q 6 hrs 100 mg po or IV q 12 hrs 900 mg IV q 8 hrs 2 mg/kg IV or IM followed by 1.5 mg/kg IV or IM q 8 hrs 400 mg po bid x 14 d 500 mg po qd x 14 d 500 mg po bid x 14 d 250 mg IM 2 g IM 1 g po 100 mg po bid x 14 d	Parenteral⁹ Either Ofloxacin ² 400 mg IV q 12 hrs or Levofloxacin ² 500 mg IV qd plus Metronidazole 500 mg IV q 8 hrs or Ampicillin/Sulbactam 3 g IV q 6 hrs plus Doxycycline ² 100 mg po or IV q 12 hrs
MUCOPURULENT CERVICITIS^{5,8,10}	<ul style="list-style-type: none"> • Azithromycin or • Doxycycline² 	1 g po 100 mg po bid x 7 d	Erythromycin base 500 mg po qid x 7 d or Erythromycin ethylsuccinate 800 mg po qid x 7 d or Ofloxacin ² 300 mg po bid x 7 d or Levofloxacin ² 500 mg po qd x 7 d
NONGONOCOCCAL URETHRITIS⁵	<ul style="list-style-type: none"> • Azithromycin or • Doxycycline 	1 g po 100 mg po bid x 7 d	Erythromycin base 500 mg po qid x 7 d or Erythromycin ethylsuccinate 800 mg po qid x 7 d or Ofloxacin 300 mg po bid x 7 d or Levofloxacin 500 mg po qd x 7 d
EPIDIDYMITIS^{5,8}	Likely due to Gonorrhea or Chlamydia <ul style="list-style-type: none"> • Ceftriaxone plus Doxycycline Likely due to enteric organisms <ul style="list-style-type: none"> • Ofloxacin or Levofloxacin 	250 mg IM 100 mg po bid x 10 d 300 mg po bid x 10 d 500 mg po qd x 7 days	
TRICHOMONIASIS¹¹	<ul style="list-style-type: none"> • Metronidazole 	2 g po	Metronidazole 500 mg po bid x 7 d
BACTERIAL VAGINOSIS			
Adults/Adolescents	<ul style="list-style-type: none"> • Metronidazole or • Clindamycin cream¹² or • Metronidazole gel 	500 mg po bid x 7 d 2%, one full applicator (5g) intravaginally qhs x 7 d 0.75%, one full applicator (5g) intravaginally qd x 5 d	Metronidazole 2 g po or Clindamycin 300 mg po bid x 7 d or Clindamycin ovules 100 g intravaginally qhs x 3 d
Pregnant Women	<ul style="list-style-type: none"> • Metronidazole or • Clindamycin 	250 mg po tid x 7 d 300 mg po bid x 7 d	
CHANCROID	<ul style="list-style-type: none"> • Azithromycin or • Ceftriaxone or • Ciprofloxacin² or • Erythromycin base 	1 g po 250 mg IM 500 mg po bid x 3 d 500 mg po tid x 7 d	
LYMPHOGRANULOMA VENEREUM	<ul style="list-style-type: none"> • Doxycycline² 	100 mg po bid x 21 d	Erythromycin base 500 mg po qid x 21 d Azithromycin 1 g po qd x 21 d

1 Annual screening for women age 25 years or younger. Nucleic Acid Amplification Tests (NAATS) are recommended. Women with chlamydia should be rescreened 3-4 months after treatment.
2 Contraindicated for pregnant and nursing women.
3 Test-of-cure follow-up is recommended because the regimens are not highly efficacious (Amoxicillin and Erythromycin) or the data on safety and efficacy are limited (Azithromycin).
4 Co-treatment for chlamydia infection is indicated unless chlamydia infection is ruled out using sensitive technology.
5 If gonorrhea is documented and it persists or recurs, test-of-cure culture is recommended to ensure patient does not have an untreated resistant gonorrhea infection.
6 Not recommended for pharyngeal gonococcal infection.
7 Due to quinolone-resistant strains in California, Hawaii and the Pacific Rim, quinolones should not be first line treatment if patient was exposed in these areas.
8 Testing for gonorrhea and chlamydia is recommended because a specific diagnosis may improve compliance and partner management.
9 Discontinue 24 hours after patient improves clinically and continue with oral therapy for a total course of 14 days.
10 If gonorrhea is documented, add a gonorrhea treatment regimen.
11 Documented infection with treatment failure should be evaluated for metronidazole-resistant T. vaginalis. Referral to CDC at (404) 639-1898 or (770) 488-4115.
12 Might weaken latex condoms and diaphragms because oil-based; not recommended in pregnancy.

DISEASE	RECOMMENDED REGIMENS	DOSE/ROUTE	ALTERNATIVE REGIMENS
HUMAN PAPILLOMAVIRUS			
External Genital/ Perianal Warts	Patient Applied <ul style="list-style-type: none"> Podofilox¹³ 0.5% solution or gel or Imiquimod¹⁴ 5% cream Provider Administered <ul style="list-style-type: none"> Cryotherapy or Podophyllin¹³ resin 10%-25% in tincture of benzoin or Trichloroacetic acid (TCA) or Bichloroacetic acid (BCA) 80%- 90% or Surgical removal 		Alternative Regimen Intralesional interferon or Laser surgery
Mucosal Genital Warts	<ul style="list-style-type: none"> Cryotherapy or TCA or BCA 80%-90% or Podophyllin¹³ resin 10%-25% in tincture of benzoin or Surgical removal 	Vaginal, urethral meatus, and anal Vaginal and anal Urethral meatus only Anal warts only	
HERPES SIMPLEX VIRUS¹⁵			
First Clinical Episode of Herpes	<ul style="list-style-type: none"> Acyclovir or Acyclovir or Famciclovir or Valacyclovir 	400 mg po tid x 7-10 d 200 mg po 5/day x 7-10 d 250 mg po tid x 7-10 d 1 g po bid x 7-10 d	
Episodic Therapy for Recurrent Episodes	<ul style="list-style-type: none"> Acyclovir or Acyclovir or Acyclovir or Famciclovir or Valacyclovir or Valacyclovir 	400 mg po tid x 5 d 200 mg po 5/day x 5 d 800 mg po bid x 5 d 125 mg po bid x 5 d 500 mg po bid x 3-5 d 1 g po qd x 5 d	
Suppressive Therapy	<ul style="list-style-type: none"> Acyclovir or Famciclovir or Valacyclovir or Valacyclovir 	400 mg po bid 250 mg po bid 500 mg po qd 1 g po qd	
HIV Infection¹⁶			
Episodic Therapy for Recurrent Episodes	<ul style="list-style-type: none"> Acyclovir or Acyclovir or Famciclovir or Valacyclovir 	400 mg po tid x 5-10 d 200 mg po 5/day x 5-10 d 500 mg po bid x 5-10 d 1 g po bid x 5-10 d	
Suppressive Therapy	<ul style="list-style-type: none"> Acyclovir or Famciclovir or Valacyclovir 	400-800 mg po bid-tid 500 mg po bid 500 mg po bid	
SYPHILIS			
Primary, Secondary, and Early Latent	<ul style="list-style-type: none"> Benzathine penicillin G 	2.4 million units IM	Doxycycline ^{2,17} 100 mg po bid x 2 weeks or Tetracycline ^{2,17} 500 mg po qid x 2 weeks or Ceftriaxone ¹⁷ 1 g IM/IV qd x 8-10 d or Azithromycin ¹⁷ 2 g po
Late Latent and Unknown duration	<ul style="list-style-type: none"> Benzathine penicillin G 	7.2 million units, administered as 3 doses of 2.4 million units IM, at 1-week intervals	Doxycycline ^{2,17} 100 mg po bid x 4 weeks or Tetracycline ^{2,17} 500 mg po qid x 4 weeks
Neurosyphilis ¹⁸	<ul style="list-style-type: none"> Aqueous crystalline penicillin G 	18-24 million units daily, administered as 3-4 million units IV q 4 hrs x 10-14 d	Procaine penicillin G, 2.4 million units IM q d x 10-14 d plus Probenecid 500 mg po qid x 10-14 d or Ceftriaxone ¹⁷ 2 g IM/IV qd x 10-14 d
Pregnant Women¹⁹			
Primary, Secondary, and Early Latent	<ul style="list-style-type: none"> Benzathine penicillin G 	2.4 million units IM	None
Late Latent and Unknown duration	<ul style="list-style-type: none"> Benzathine penicillin G 	7.2 million units, administered as 3 doses of 2.4 million units IM, at 1-week intervals	None
Neurosyphilis ¹⁸	<ul style="list-style-type: none"> Aqueous crystalline penicillin G 	18-24 million units daily, administered as 3-4 million units IV q 4 hrs x 10-14 d	Procaine penicillin G, 2.4 million units IM q d x 10-14 d plus Probenecid 500 mg po qid x 10-14 d
HIV Infection			
Primary, Secondary and Early Latent	<ul style="list-style-type: none"> Benzathine penicillin G 	2.4 million units IM	Doxycycline ^{2,17} 100 mg po bid x 2 weeks or Tetracycline ^{2,17} 500 mg po qid x 2 weeks
Late Latent, and Unknown duration ¹⁹ with normal CSF Exam	<ul style="list-style-type: none"> Benzathine penicillin G 	7.2 million units, administered as 3 doses of 2.4 million units IM, at 1-week intervals	None
Neurosyphilis ^{18,19}	<ul style="list-style-type: none"> Aqueous crystalline penicillin G 	18-24 million units daily, administered as 3-4 million units IV q 4 hrs x 10-14 d	Procaine penicillin G, 2.4 million units IM q d x 10-14 d plus Probenecid 500 mg po qid x 10-14 d

13 Contraindicated during pregnancy.

14 Safety in pregnancy has not been well established.

15 Counseling about natural history, asymptomatic shedding, and sexual transmission is an essential component of herpes management.

16 If lesions persist or recur while receiving antiviral therapy, HSV resistance should be suspected and a viral isolate should be obtained for testing.

17 Because efficacy of these therapies has not been established and compliance of some of these regimes difficult, close follow-up is essential. If compliance or follow-up cannot be ensured, then patient should be desensitized and treated with benzathine penicillin.

18 Some specialists recommend 2.4 million units of benzathine penicillin G q week for 1 to 3 weeks after completion of initial treatment.

19 Patients allergic to penicillin should be treated with penicillin after desensitization.

Functional Status, Well-Being, and Chronic Kidney Disease

This article is the tenth of a series about chronic kidney disease and its management based on the new National Kidney Foundation guidelines. If you missed previous articles in this series, please log onto the IHS website. Archived issues of The Provider are found at the Clinical Support Center's web page.

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As noted in previous articles in this series about chronic kidney disease, the number and severity of complications increases as the glomerular filtration rate (GFR) decreases below 60 mL/min/1.73 m². As the GFR declines, physical, mental, social, and role dysfunctions are seen. Poorer general health, negative health perceptions, reduced vitality and exercise capacity, depression, and increased work limitations contribute to the sense of loss of control. Quality of life, no matter how you define it, can be impacted by chronic kidney disease.

Patients with a GFR < 60 mL/min/1.73 m² should be assessed for impairment in functional status and well-being to establish a baseline, monitor changes, and evaluate the effectiveness of interventions. Various tools are available for assessing functional status and well-being. The Dartmouth COOP charts, the Duke Health Profile/Duke Severity of Illness (DUKE/DUSOI), the Medical Outcomes Study 36-Item Short Form (SF-36), or the Kidney Disease Quality of Life (KDQOL) are among the tools that can be used.

For example, the Dartmouth COOP uses stick figures and faces to ask about changes during the past four weeks in physical fitness, feelings, daily activities, social activities, change in health, overall health, social support, and quality of life.

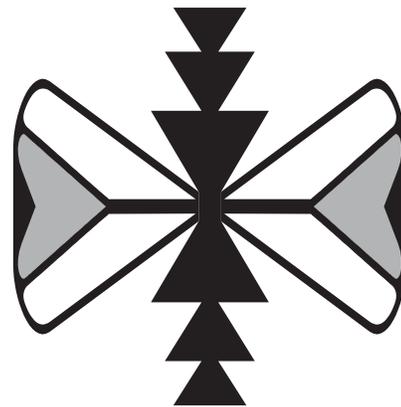
The SF-36 uses various written scales to assess health (current, and a year ago), how health has affected the activities of a typical day, how activities have changed in the past four weeks, emotional problems, bodily pain; pain interfering with normal work, feelings, social activities, and health perceptions.

An easy way to screen for functional changes is to ask "Do you need help with activities of daily living (bathing, dressing, toileting, transfer, continence, and feeding)?" If so, further assessment may be warranted.

A GFR of 60 is the point at which further assessment is needed for the many possible complications. Check for anemia and treat as indicated. Reduced fatigue and increased energy can significantly improve the quality of life. Refer to a dietitian for nutritional assessment and to prevent malnutrition. Nutritional counseling can improve or help maintain nutritional status and delay the need for dialysis. Review laboratory markers for metabolic bone disease (calcium, phosphorus,

iPTH, Vitamin D, as needed) and help prevent fractures, reduce calcification of soft tissue, and itching. Evaluate control of diabetes and any associated neuropathy. All chronic kidney disease patients should be considered high risk for cardiovascular disease and should be evaluated for this.

Chronic kidney disease cannot be cured. Maximizing the quality of life is an essential health care goal for these patients. Once the GFR falls to 60 or below, be aware that functional status and well-being can be negatively impacted.



Documenting and Coding on the PCC+ Form

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Background

This article is designed to assist the provider with accurately completing and coding the PCC+ form. The medical record serves many functions; it facilitates: 1) planning health care and medical treatment; 2) communication and continuity of care among health professionals; 3) legal documentation that benefits the patient, physician, and health care program; 4) recording any financial activity involving patient care; and 5) collection of basic data for health research, planning, and budgeting.^{1,2,3}

Using “documentation tools that incorporate key data points yet are user friendly will improve overall compliance, as well as serve as a communication vehicle for the entire health-care team.”⁴ The PCC+ (Patient Care Component Plus) customizable encounter form is a Resource Patient Management System (RPMS) application. The ultimate goal of PCC+ is to improve the quality of health care, data integrity, and billing integrity. This is accomplished by combining the best features of the PCC encounter form, a superbill, and the health summary into one integrated document. The PCC+ form provides the capabilities of check boxes; however, this in itself cannot substitute for the handwritten narrative of the provider. Check boxes are used to support the written documentation, not replace it.⁵ The following outline highlights the correct format for the provider to produce documentation on the PCC+ form, regardless of the clinical setting.

History

The history section of the PCC+ form has the potential to improve documentation, as well as reduce overall time spent doing it. Each type of history includes all or some of the following elements: 1) chief complaint (or CC); 2) history of present illness (HPI); 3) review of systems (ROS); and past, family, and social history (PFSH). The extent of HPI, ROS, and PFSH that is obtained and documented is dependent upon clinical judgment and the nature of the presenting problem.

- The CC is “a concise statement describing the symptom, problem, condition, diagnosis, physician recommended return, or other factor that is the reason for the encounter, usually stated in the patient’s words.”²
- The HPI is “a chronological description of the devel-

opment of the patient’s present illness from the first sign and/or symptom or from the previous encounter to the present. It includes the following elements: (a) location, (b) quality, (c) severity, (d) duration, (e) timing, (f) context, (g) modifying factors, and (h) associated signs and symptoms.”²

- The ROS is “an inventory of body systems obtained through a series of questions seeking to identify signs and/or symptoms which the patient may be experiencing or has experienced.”² The patient’s positive responses and pertinent negatives for the system(s) related to the problem should be documented. Check only the areas that were reviewed and/or discussed with the patient during the visit. DO NOT check all the boxes routinely. Check (✓) for normal and use an (X) for abnormal. For normal, the provider needs to briefly document a note on each. For abnormal, the provider should record a note as to the abnormal findings. Systems reviewed should be referenced in some format in the provider’s notes. This is a provider documentation requirement and will assist the provider and coder in both selecting and validating the appropriate E/M services.

Past, Family, and/or Social History (PFSH)

The PFSH consists of a review of three areas: 1) history of the patient’s experiences with illnesses, operations, injuries, and treatments; 2) family history, or a review of medical events and conditions in the patient’s family, including diseases that may be hereditary or may place the patient at risk; and 3) social history, or an age-appropriate review of past and current activities.² PFSH components on the PCC+ form requiring provider attention to documentation include: 1) health factors for alcohol and tobacco use; 2) allergies; and 3) reproductive history.

Health Factors

Health Factors (HF) are health indicators that matter to the health of individuals and communities⁶ but are not captured within other fields of the RPMS/PCC system. The nurse or provider needs to complete the tobacco health factor area (see Table 1 for options for responses), as well as others that may be included on the PCC+ form.

Table 1. Health Factors

Health Factor	Provider Documentation
Tobacco	Cessation Smokeless
	Cessation Smoker
	Current Smoker
	Current Smokeless
	Current Smoker and Smokeless
	Exposure to Environmental Tobacco Smoke
	Non-Tobacco User
	Previous Smokeless
	Previous Smoker
	Smoke Free Home
	Smoker in Home

Allergies

Document any known allergies. Recorded allergies are entered into the system and will be displayed on both the PCC+ form and health summary.

Reproductive History

The reproductive history consists of gravity (G), parity (P), living children (LC), spontaneous abortions (SA), therapeutic abortions (TA); last menstrual period (LMP); and family planning methods (FPM). These items are recorded, entered into the system, and displayed on both the PCC+ form and health summary.

Examination

The extent of the examination is selected by the provider and is based upon clinical judgment, patient history, and the nature of the presenting problem.² The provider’s examination for the organ system(s) related to the problem should be documented. Check only the areas that were examined during the visit. DO NOT check all the boxes routinely. Check (✓) for normal and use an (X) for abnormal. For normal, the provider needs to briefly document a note on each. For abnormal, the provider should document a note as to the abnormal findings. Systems examined should be referenced in some format in the provider’s notes.

Measurements

Measurements are recorded and entered into the PCC system.

Diagnosis and Problem List

The diagnoses on the PCC+ form are listed in two adjacent components: the “Active Problem/Recent POV” and “Provider Preferences (ICD-9 pick list). Proper use of these lists facilitates documentation, legibility, and coding compliance. A purpose of visit (POV) is a reason for coming to clinic. Valid reasons include vague symptoms, defined diseases, follow-up activities, tests, medication refills, and other services. A diag-

nosis is a clinical assessment that can be associated with an ICD-9 code. Examples include headache, diabetes, hypertension or prenatal care. Many diagnoses (or POVs) may be documented on a single visit and the same diagnosis (or POV) can be entered on repeated visits. The problem list is a list of significant illnesses, surgeries, and social problems.

Documenting the Purpose of Visit or Diagnoses

The method for documenting POVs and/or diagnoses is as follows:

- To select the diagnosis codes for today’s visit, sequence (1, 2, 3, etc.) in order of priority or importance from the “Active Problem List,” previous “POV,” or “User Preferences” (ICD-9 pick list).
- Only use the “Additional Purpose of Visit” area for a diagnosis NOT listed in the Active Problem list, previous Purpose of Visit list or ICD-9 pick list.

Manipulating the Problem List

Problems are categorized as “active” – currently needing attention, or “inactive” – not currently needing attention but still clinically significant. The “Active Problem List” and previous “POV” relate to the patient’s prior visit(s). It is a merged field from RPMS.

- To remove a problem, write “R” in the left column of the “Active Problem” section.
- To make a problem inactive, write “I” in the “Active Problem” section.
- To add a problem, write “A” in the recent “POV” and “User Preferences” (ICD-9 pick list) section.
- To add a problem that does not appear on the list, write your entry in the “POV” narrative section.

Amount and/or Complexity of Data to be Reviewed

The amount and complexity of data to be reviewed “is based on the types of diagnostic testing ordered or reviewed.”² Document the medical necessity for laboratory, radiology, and other diagnostic testing on the PCC+ form by:

- Checking the box;
- Placing your initial by the box; and
- Writing the symptom, purpose of visit, and/or diagnosis for the test.

Proper documentation of diagnostic procedures and management options to support risk of significant complications, morbidity, and/or mortality is accomplished on the 1) orderables or CPT preferences and 2) medication sections of the PCC+ form.

CPT Preferences

Orderables or CPT⁷ preferences include exams, immunizations, injections, treatments, and supplies. Document CPT preferences by:

- Checking the box;
- Placing your initial by the box; and
- Writing the number of supplies and/or treatments.

Refusals

Providers need to document test refusals in one of two areas of the PCC+: 1) POV Section by stating “Refused _____” or write “Refused” in the appropriate order box.

Medication Section

The medication list on the PCC+ encounter form can be configured to display all medications, active medications, or only chronic medications.

- Utilize a “✓” mark by the date to indicate the provider’s review.
- To delete medications, cross a line through the drug and initial.
- To change dosage or the quantity per day (such as BID or QID), draw a line through the medication, initial and rewrite with changes.
 - To renew prescriptions, list the following:
 - Quantity “Q,” such as 30 days, 60 days, etc.
 - Refill “R,” such as two refills.
 - Check chronic “C” if this is a chronic medication.
 - Check “ORX” if this is a prescription that the patient receives on the outside.
 - Write all narcotics and new drugs with medication name, dosage, refill requirements, and number of times per day at the bottom of the pharmacy area or on a PCC continuation sheet.

Counseling or Coordination of Care

In the case where “counseling and/or coordination of care dominates (more than 50%) of the physician/patient and/or family encounter (face-to-face time), time is considered the key or controlling factor to qualify for a particular level of E/M services.”²² For example, if the provider elects to report the level of service based on counseling and/or coordination of care, the total length of time of the encounter should be documented and the record should reflect the counseling and/or activities to coordinate care.

Patient Education

The Indian Health Service “Patient and Family Education Protocols and Codes”²⁸ assist health care providers with the documentation and tracking of patient education. Although these codes facilitate the documentation of patient and family education, they do not replace the written SOAP note. The PCC+ form patient education section consists of six components: 1) patient education code and/or ICD-9 diagnosis; 2) patient education topic; 3) level of understanding to include good (G), fair (f), poor (P), refuse (R), and group (Gp); 4) provider of education; 5) face-to-face time in minutes; and 6) any written comments. The comments section may be used to document “readiness to learn” and/or “barriers to learning.” An example of a patient education section on the PCC+ form is found in Figure 1.

Figure 1. Patient Education

Patient Education					
Diagnosis or Code	Topic	Understanding	Provider	Time (min)	Comments
DM, HTN,	DP, C, LA	G F P Group Refused			
		G F P Group Refused			
		G F P Group Refused			
		G F P Group Refused			
		G F P Group Refused			

Closing out the Patient Encounter

To close out the patient encounter, assign the Evaluation and Management code, future plans, and patient instructions. For plans, instructions, and referrals, list the following:

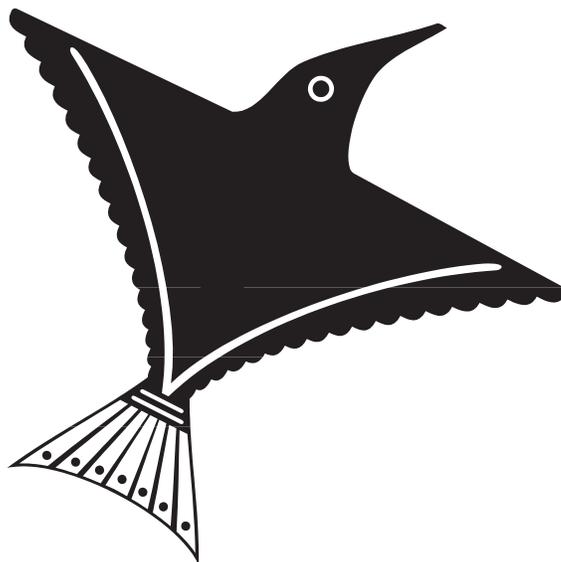
- List return visit (e.g., 2 months, 3 months, etc.) and estimated length of next appointment (e.g., 15 minutes, 30 minutes, etc.).
- List all referrals to Contract Health Services (CHS), other providers in clinic such as podiatry, dental, dietary, or exercise programs.
- As a suggestion, give the patient an appointment form with return visit information in lieu of having the chart forwarded to the appointment clerk.
- Referral forms for CHS still need completed manually or electronically.

Conclusion

PCC+ is a useful RPMS application that facilitates clinical care and medical records documentation for services according to accepted documentation guidelines. A follow-up article is planned to review the documentation and coding for Evaluation and Management. □

References

1. AHIMA. Legal Documentation Standards. [On-line] <http://www.ahima.org/infocenter/guidelines>.
2. Health Care Financing Administration. (1997). 1997 Documentation Guidelines for Evaluation and Management Services [On-line] <http://cms.hhs.gov/medlearn/master1.pdf>.
3. Indian Health Service. (1993). Indian Health Manual, Part 3, Chapter 3, Medical Records. [On-line] <http://www.ihs.gov/PublicInfo/Publications/IHManual>.
4. O'Conner, Mary. (2003). Pain Management: Improving Documentation of Assessment and Intensity. Journal of Healthcare Quality. [On-line] <http://www.allenpress.com/jhq/124>.
5. Indian Health Service, Information Technology Support Center, Division of Information Resources, (2002). PCC+ Encounter From and Health Summary Package, User's Guide, Version 1.2. [On-line] http://www.ihs.gov/Cio/RPMS/PackageDocs/ven/ven_012u.pdf5.
6. Office of Disease Prevention and Health Promotion, U.S. Department of Health and Human Services, Healthy People 2010. Leading Health Indicators. [On-line] <http://www.healthypeople.gov/lhi/priorities.htm>.
7. American Medical Association. (2003). Current Procedural Terminology (CPT). AMA Press. Chicago, Illinois.
8. Indian Health Service (2002). Patient and Family Education Protocols and Codes [On-line] http://www.ihs.gov/NonMedicalPrograms/HealthEd/Protocols/Protocols_2002.



Clinical Data Challenges in an Era of Hardball Performance Management: Part I

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Introduction

The Indian Health Service (IHS), like all federal agencies, is under increasing pressure to demonstrate progress in a measurable way towards its mission and goals. The current administration is actively promoting agency accountability and is tying agency budgets to performance as one of five key initiatives within the President's Management Agenda (PMA).

As one of the requirements of the Government Performance and Results Act (GPRA), IHS submits a performance plan every year describing specifically what the agency intends to accomplish and how those accomplishments will be measured. These performance measures, or "GPRA indicators," are then assessed and reported at the end of the year. The intent of the reporting is to demonstrate what IHS is accomplishing with its Congressional appropriations.

Appropriately for a healthcare organization, most IHS GPRA indicators concern clinical treatment and prevention measures. Since clinical care is provided in the field, understanding and reporting on clinical indicators can no longer be solely the concern of IHS Headquarters staff. As stated in the IHS Strategic Plan, "the need to better inform and communicate health issues to Congress is essential. This requires the participation of all stakeholders with a consistent and coordinated message."

Collecting and reporting data that are comparable across all direct IHS, tribal, and urban sites (I/T/Us), as well as to the larger national healthcare community, is essential to this process. Improved data collection and quality will provide consistent data across all I/T/Us and are critical to providing better patient care, as well as timely and accurate performance measures. Data must be utilized appropriately to improve health status. The integration of a performance measurement, evaluation, and feedback loop is critical to improving the health of individuals, as well as populations.

The purpose of this article is to encourage all I/T/U providers to regard GPRA and related clinical performance reporting as an opportunity to promote and participate in clinical data quality and care improvement, not just as an administrative burden.

The IHS Strategic Plan: Improving the Health of American Indian and Alaska Native People Through Collaboration and Innovation

The Government Performance and Results Act (GPRA) requires federal agencies to demonstrate that they are using their funds effectively toward meeting their missions. The law requires agencies to have a 5-year Strategic Plan in place and to submit Annual Performance Plans. The strategic plan provides the framework for implementing all other parts of GPRA and sets out a course of action and accomplishment over the long term.

The IHS Strategic Plan, released in 2003, contains four overarching strategic goals, as follows:

1. Build Healthy Communities
2. Achieve Parity in Access by 2010
3. Provide Compassionate, Quality Health Care
4. Embrace Innovation

Each strategic goal is composed of specific objectives and a list of potential Action Performance Goals to assess progress in reaching each objective. The entire text of the IHS Strategic Plan is available at <http://www.ihs.gov/NonMedicalPrograms/PlanningEvaluation/index.asp>.

Strategic Plan: Data Initiatives

One of the Strategic Planning Workgroup's five key planning assumptions was that data and information technology needs are increasing. Two objectives specifically address health measures and data.

Objective 1.3. Ensure access to information and technical expertise to define and characterize the community, identify the community health problems, and monitor the effectiveness of community interventions...

Objective 3.3. Provide quality health information for decision making to patients, providers, and communities through improved information systems...

The strategic goals associated with data use and quality include ensuring measurable and trackable clinical indicators, defining outcome and service delivery measures, and integrating these measures better with GPRA and other agency reporting requirements.

IHS and the Government Performance and Results Act (GPRA)

GPRA is a federal law requiring a data-supported audit trail from appropriated dollars to activities and ultimately to customer benefits or outcomes, consistent with an agency's mission. As described above, GPRA requires agencies to submit Annual Performance Plans in addition to having a 5-year Strategic Plan in place. The Performance Plan describes specifically what the agency intends to accomplish toward their strategic goals with their annual budget; each agency develops its own indicators. Every year, the agency reports on how the agency measured up against the GPRA indicators defined in the plan.

For FY 2003, the IHS has 40 GPRA indicators in four main categories: Treatment (20), Prevention (12), Capital Programming/Infrastructure (2) and Partnerships/Core Functions/Advocacy (6). The Treatment category includes indicators covering diabetes, cancer, behavioral health, oral health, accreditation, and medications. An example of a treatment indicator is #2 Diabetes: Glycemic Control – during FY 2003, maintain the FY 2002 performance level for glycemic control in the proportion of I/T/U clients with diagnosed diabetes (defined as Hemoglobin A1C value equal to or less than 7). The IHS FY2001 rate was 30%; the Healthy People 2010 goal is 40%.

The Prevention category includes indicators covering public health nursing, immunization, injury prevention, behavioral health, cardiovascular disease, obesity, tobacco use, and HIV. An example of a prevention indicator is #25 Influenza Vaccine Rates – in FY2003, maintain FY2002 influenza vaccination rates among non-institutionalized adult patients aged 65 years and older. The IHS FY 2002 rate was 31%; the Healthy People 2010 goal is 90%.

For a complete list of IHS GPRA indicators, and for links to GPRA Plans and Performance Reports, go to <http://www.ihs.gov/NonMedicalPrograms/PlanningEvaluation/pe-gpra.asp>

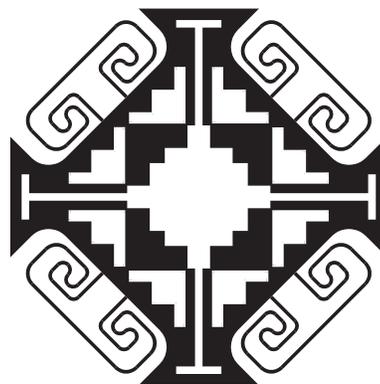
Indicators are further characterized by type, as follows:.

Process Indicators	Activities and health services that contribute to reducing mortality and morbidity Examples – construction of clinics, identification of prevalence of disease, patient satisfaction surveys
Impact Indicators	Scientific evidence-based link to improved health outcomes by reducing risk factor of mortality or morbidity Examples – immunizations, dental sealants, safe drinking water, cancer screenings
Outcome Indicators	Directly relate to reducing mortality or morbidity relative to a disease or condition that program(s) addresses Examples – reducing prevalence of obesity, diabetic complications, unintentional injury

For FY 2003, IHS has been requested by the Office of Management and Budget (OMB) to reduce process indicators and increase outcome indicators.

One of the greatest challenges of implementing the GPRA in a public health program is responding to the requirements of demonstrating an outcome focus on one hand and better linkages to funding (and hence, costs) on the other. These are difficult and in some cases impossible goals to mutually accomplish. The IHS has integrated the use of process, impact, and a few outcome indicators; however, because many health outcomes cannot be realized in a one-year plan, we have predominantly focused on activities that have an evidenced-based association with positive health outcomes over time (impact).

The IHS was evaluated for FY 2001 as “moderately effective at providing health care services to Native Americans, reducing health disparity, constructing new and replacement hospitals, and managing self-governance activities.” IHS reported its FY 2002 performance on 40 indicators in late January. Thirty-one of 40 measures were reported at that time; of the 31 reported, 25 were completely met, one was partially met, and five were missed. Missed indicators included: Childhood Immunization; Influenza Immunization; Pap Screening; Water Fluoridation, and HRMI Survey.



In addition to assessing an agency's success in meeting its GPRA indicators, OMB has developed the Program Assessment Rating Tool (PART), comprised of assessment criteria to measure and diagnose program performance and management. PART is intended to enhance the practical use of performance information by establishing a systematic, consistent, and public process for developing program performance ratings.

The PART process evaluates program effectiveness in four areas: purpose, strategic planning, program management, and program results. PART results are based on GPRA annual performance measures and strategic plan long-term goals.

The intent of the annual performance assessment effort is to improve agency GPRA plans and reports by maintaining measures that are useful and eliminate reporting burdens that have no utility. Although FY 2004 budget decisions will be fundamentally grounded in program performance, they will also continue to be based on a variety of other factors, including policy objectives and priorities of the Administration, and economic and programmatic trends.

The Role of GPRA Reporting in Analyzing and Affecting Health Status

The IHS's assessed performance has implications for the health status of our population. The IHS annual performance plan outlines the incremental steps necessary to achieve our Strategic Goals identified in the IHS Strategic Plan and make progress toward our Mission. The Strategic Goals provide the framework for a set of key long-term outcome goals that are addressed through the GPRA performance indicators. The performance indicators in turn address the most significant health problems facing the American Indian and Alaska Native (AI/AN) population as identified by representatives of the local I/T/U programs as well as management areas of the President's Management Agenda.

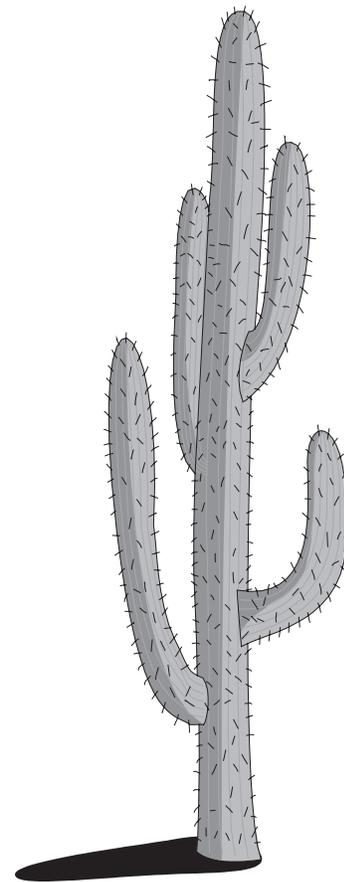
The IHS recognizes that data must be utilized in an appropriate manner to improve health status. Required performance reporting provides us with a rationale and timeline to establish and maintain an ongoing process to identify, measure, and evaluate indicator results. By establishing a feedback loop of results evaluation and indicator refinement or redefinition based on evidence-based criteria, we can ensure that IHS clinical indicators mirror our key areas of concern for the AI/AN population and contribute to improving health of individuals as well as populations.

GPRA links health care process to outcomes by:

- Primary prevention: prevention of disease or condition before it occurs
- Secondary prevention: reduction of morbidity and mortality associated with disease or condition, after it occurs
- Early interventions: early recognition and treatment versus targeting end point problems, e.g., strokes

In order to improve health status, the I/T/U system must be able to make comparisons both within the I/T/U system and to the larger national medical community. The adoption of comparable health outcome indicators that are used by others, such as HEDIS or Healthy People 2010, will help in this endeavor.

The next article in this series on Clinical Data Challenges will discuss clinical indicator development, selection, and reporting criteria. The third article will discuss the GPRA+ Clinical Indicator Reporting System, an RPMS software tool that reports on clinical performance indicators at a local and Area level. □





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