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The Indian Health Service Suicide Prevention Work Plan

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Introduction

Suicides and suicide-related behaviors exact a profound toll on American Indian and Alaska Native (AI/AN) communities. Despite the gains made in other areas such as infectious disease and infant mortality, suicides and their cousins, homicides and accidental death, are synonymous with the wrenching cultural dislocation and widespread poverty many indigenous communities continue to experience. Suicides reverberate through close-knit communities and continue to affect survivors many years after the actual incident.

With death rates 2 - 3 times the national average across all Indian country, particularly for young and working age AI/AN males, and rates approaching epidemic proportions in some AI/AN communities, and with suicide always being among the top ten causes of mortality for those under age 55, reducing suicide is a task requiring urgent and dedicated attention.

In 2003, the Indian Health Service (IHS), under the aegis of Dr. Charles Grim, chartered the IHS Suicide Prevention Committee (SPC). The committee was tasked with identifying and defining the steps needed to build on the suicide prevention efforts of the past in order to significantly reduce the impact of suicide and suicide-related behaviors on AI/AN communities. Members of the committee were selected to represent affected AI/AN communities in the broadest fashion possible. They included therapists, school superintendents, psychologists, psychiatrists, agency administrators, injury prevention specialists, social workers, and traditional practitioners from a broad geographic distribution and from mixed IHS, tribal, and urban settings. The committee met both

face-to-face and by phone and sought consultation from a variety of sources in developing what is now known as the IHS National Suicide Prevention Committee Work Plan.

The plan follows, in many aspects, the National Strategy for Suicide Prevention, a national initiative to reduce the impact of suicide and suicide-related behaviors. It will be revised over time as tasks are accomplished and further tasks identified. At its best, the plan will be a living and constantly changing reflection of the collaborative and focused efforts of

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the many people throughout AI/AN communities who are working to reduce the scourge of suicide.

Please note that sections in *italics* throughout the plan identify current progress on the identified objectives.

The IHS Suicide Prevention Committee Work Plan Statement of Purpose

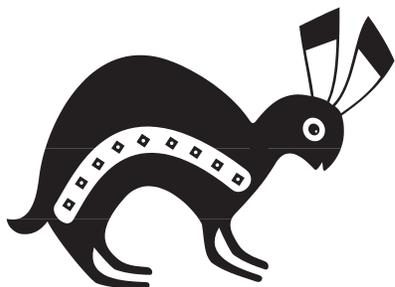
To develop, advocate for, and coordinate a comprehensive cultural- and community-based approach to reduce suicidal behaviors and suicides in AI/AN communities.

Guiding Principles for the SPC Work Plan

We care. We love. We respect. Sung, spoken, or prayed, healing the affliction of suicide in all AI/AN communities starts with these six simple words. Throughout this work plan, we strive to be respectful to tribal and urban American Indian/Alaska Native communities and cultures. We intend this plan to be grounded in spirituality and to incorporate collaboration, care, and healing into the plan through culture. We want to help tribal and urban communities access their own spiritual, mental, emotional, and physical strengths. We believe suicide occurs to and in communities, that suicide is an act rooted in the history of a particular person, family, and people, and that to root it out will require the best holistically and culturally wise, collaborative efforts our communities and the bureaucracies that serve them can muster. We believe that our work must recognize the historical impact of colonization on our people and must incorporate this understanding into our efforts if our work is to succeed for future generations. We believe that helping communities keep all of their members in the circle and promoting communication between families, community members, and organizations is critical to reducing suicide.

With these principles in mind, we hope to provide a holistic, cultural foundation to suicide prevention, building on the strong resilience of American Indian/Alaska Native communities. We will strive to bridge concepts between American Indian/Alaska Native communities and bureaucracies in order to effectively prevent suicide.

The work plan covers three broad areas of interest and is correlated with the National Strategy for Suicide Prevention (NSSP). These areas are as follows: Awareness (NSSP Goal 1); Interventions (NSSP Goals 4, 6, and 7); and Methodologies (NSSP Goals 10 and 11).



Work Plan Outline

Awareness — Community Education and Outreach (NSSP Goal 1: Promote awareness that suicide is a public health problem that is preventable)

Guiding Principle: Collaboration with other agencies, providers, and organizations to share information and resources by promoting awareness that suicide is preventable.

- Addressing the stigma by desensitizing “seeking help”
- Developing awareness education for various groups (including law enforcement, school personnel, survivors, foster parents, and others)
- Disseminating information via the Internet for a broad audience

Objective 1: Recommend the designation of an IHS/SPC Public Awareness Coordinator to assist communities in tailoring public awareness information for their communities. Designate an IHS/SPC Coordinator of Public Awareness to take charge of a national public awareness campaign on suicide prevention. Consider establishment of a new position at the national level. Coordinator to work in collaboration with established programs such as HP/DP to implement campaign. *Discussions are underway through collaboration with the National Indian Health Board to identify funds for a national coordinator position. Initially, the function will be contracted out to already existing behavioral health contracts to initiate development of public media materials.*

Objective 2: Have resources and ideas on public awareness campaigns available on the IHS website under the IHS/SPC. *A contract for website design and maintenance is active as part of a larger multinational effort to develop a website for indigenous suicide prevention.*

Interventions — Clinical Assessment and Treatment (NSSP Goal 6: Implement training for recognition of at-risk behavior and delivery of effective treatment; NSSP Goal 7: Develop and promote effective clinical and professional practices)

Objective 1: Identify, involve, and train those programs that are vital to a Suicide Prevention Program that encompasses the life span. This may include prenatal and well-child programs, maternal/child health, school-based health programs, residential and non-residential schools, Indian Child Welfare Act support programs, alcohol/drug programs, juvenile detention, juvenile court, Temporary Aid to Needy Families programs, vocational rehabilitation programs, Tribal and Cooperative Housing Authority programs, law enforcement, regional youth drug programs, alternative schools, Boys and Girls Clubs, churches, shelters, Community Health Representatives, Elder and Senior Centers, Emergency Medical Services, and others.

Through an interagency agreement with SAMHSA, IHS has initiated the development of a community suicide prevention toolkit and is supporting the establishment and training of a group of selected IHS and tribal providers in all IHS Areas to assist in response to suicide crises and community suicide prevention programming. Next steps include broadening the application of these tools to include individual communities and developing an active network of participating communities.

Objective 2: Provide comprehensive, multidisciplinary training to enhance clinical, professional, and culturally competent practices to include:

- Screening
- Assessment
- Case management
- Intervention
- Legal/ethical concerns in practice
- Survivor issues

See Objective 1. In addition, suicide prevention has been included as a particular focus area in the national IHS/SAMHSA BHS meetings for the past two years, as well as being included in IHS Injury Prevention Seminars offered to a national audience.

Objective 3: Encourage each I/T/U community to identify a coordinator(s) of the suicide prevention training activities. Ongoing.

Objective 4: Provide samples of screening/assessment/intervention tools, case management procedures, and legal/ethical issues. Samples of suicide intervention/prevention policies have been made available at national BHS conferences and through the combined IHS/SAMHSA training project (contact Kira LeCompte, Aberdeen Area BHS for details). Further policies and tools are being reviewed and will be available through the web once the website development is completed.

Objective 5: Develop support services/after care for ongoing support to survivors (extended family, service providers/first responders). Survivor groups remain underutilized. Funding and training for these groups is needed.

Interventions – Community Programming (NSSP Goal 4: Develop and implement community-based suicide prevention programs)

Objective 1: Develop and put in place workable, community-owned suicide prevention plans that include all responsible parties within the service area.

- A. Provide samples of community assessment/community readiness models that have been used in Indian communities. Distribute on the Internet, at conferences, and by regular mail. *The Community Readiness Model developed by Plested, Edwards and Jumper-Thurman has been distributed widely and has been presented in a variety of AI/AN training venues.*

Other models, including the Public Health Model, are available and have demonstrated effectiveness.

Identify federal/state/local technical assistance teams and seek the support and endorsement of the Director of the Indian Health Service to facilitate the development of community action plans to specifically address suicide prevention/intervention. *This should be a major area of emphasis for 2006.*

- B. Promote community and tribal leaders' involvement in the assessment process and development of the Suicide Prevention Community Action plans. *See B above.*
- C. Develop a draft "Dear Tribal Leader" letter for Dr. Grim's signature requesting tribal support of the IHS Suicide Prevention Initiative's Objectives. *See the September 9, 2003 letter to tribal leaders announcing the Suicide Prevention Initiative. A follow-up letter is planned in coordination with the establishment of the community suicide prevention website and website availability of the suicide surveillance system.*

Methodology – Research (NSSP Goal 10: Promote and support research on suicide and suicide prevention)

Guiding Principle: Understand the interaction of sociocultural, historical, economic, biologic, and spiritual factors contributing to suicide from an AI/AN perspective.

Objective 1: Support culturally competent researchers who work in collaboration with communities through establishment of protocols for engaging with communities and who provide direct services to tribal members.

- A. Promote tribal oversight of IRBs for research and related activities. *This is an institutional priority.*
- B. Assist tribes in reviewing and approving research as requested. *Available as requested.*
- C. Develop criteria for cultural competence in behavioral health practice. *SPC members have participated in national collaborative efforts to define and strengthen cultural competence in BH care over the past two years. Next steps for 2006 include increasing awareness for I/T/U providers of these criteria and facilitating regional and local discussions on their practical application and implementation.*
- D. Ask that all IHS Behavioral Health Service meetings include 1) student scholarships and 2) opportunities for students to meet with AI/AN professionals. *The SPC has asked at the national level that any IHS sponsored general trainings (such as the IHS/SAMHSA BH conference) include student scholarships. At the 2005 San Diego conference, this discussion included extending such opportunities to high school students, as well as students pursuing college or postgraduate training. A more formalized process is needed to ensure that opportunities exist for professionals-in-training to meet with established professionals to facilitate mentoring and support.*

- E. Support AI/AN researchers in maintaining tribal ties in the process of their professional development. *This is an ongoing advocacy issue, and the SPC offers its support to any graduate or postgraduate students encountering difficulty negotiating a learning context that allows continued contact with their tribal communities of origin.*

Objective 2: Develop a prioritized research agenda that reflects the complexity of suicide in AI/AN Communities. *An international meeting, in collaboration with NIMH, on suicide prevention among indigenous groups is scheduled for September 22 - 24 in Albuquerque in part to help refine an American Indian/Alaska Native research priority list. The main purpose of the conference is to facilitate community feedback to researchers regarding appropriate research topics and goals as they pertain to suicide and suicide prevention.*

Objective 3: Develop and distribute epidemiologic data on mental health disorders in AI/AN populations, with a focus on suicide. *This remains an issue of some concern. Data now exist on the distribution of mental health disorders in a variety of tribal groups from a large-scale epidemiologic survey completed in the early 2000s (Manson, and others). Further work is necessary to encourage the broad distribution of these data to interested and affected tribal communities. In addition, work continues on the national IHS suicide surveillance system (see article by D. Grenier in this edition for details). This system should provide increased information about suicide and suicide-related behaviors and assist in focusing and evaluating efforts to reduce suicide.*

Methodology – Surveillance (NSSP Goal 11: Improve and expand surveillance systems)

Objective 1: Establish a national consensus on a working definition of suicide and suicide related behaviors and coordinate with a consistent reporting and data analysis process. *See Objective 2 under Methodology: Research. The IHS Suicide Surveillance System has defined many of these parameters in practice. Ongoing discussion will be necessary once data are being regularly reviewed and analyzed at the national, regional, Area, and local levels.*

Objective 2: Support reporting requirements for contracted/compacted programs to report data back to IHS. *The SPC has formally requested reporting requirements.*

Methodology – Best Practices

Objective 1: Develop a centralized clearinghouse for AI/AN behavioral health concerns including suicide. *A contract is in place to establish an internationally available clearinghouse for information on suicide prevention.*

This work plan was approved by the Indian Health Service Suicide Prevention Committee in December 2004. Members of the committee include Robert Beasley, Nancy Bill, Susan Casias-Oliver, Rose Clark, Eduardo Duran, Marlene Echohawk, Iva Graywolf, Kira LeCompte, Hayes Lewis, Kathy Moon, Peter Stuart, and Jackie Vorpahl.

Next Steps

The SPC continues to meet regularly. For the remainder of 2005 and early 2006, the emphasis will be on facilitating implementation of the above objectives. Additional objectives will be developed. The focus will continue to be on approaching suicide as occurring to individuals strongly embedded in larger communities. Interventions early in the lifespan that enhance resiliency and community and family support are specifically encouraged.

Schools, in particular, are likely to be targets of such efforts, given their broad ranging involvement in student, family, and community life. Continued support of the suicide surveillance system will be critical in terms of understanding the affected groups better and being able to monitor outcomes.

Finally, an underrecognized population that has had few, if any, efforts directed towards establishing prevention programming are males from adolescence through mid-adulthood. Understanding this group and developing targeted programming is essential to any long-term success in reducing suicide completion rates.

Summary

Suicide is a complicated public health challenge with a myriad of contributors in AI/AN communities. Only the pursuit of a multitargeted, coordinated, and persistent effort that is acutely aware of the cultural context of suicide and blends the best of traditional AI/AN healing wisdom and western public health tools is likely to succeed on a national basis.

Bibliography

1. National Strategy for Suicide Prevention: Goals and Objectives for Action, DHHS, Public Health Service, 2001.
2. Trends in Indian Health 1998-99, DHHS, Indian Health Service, 2000.
3. Reducing Suicide – A National Imperative, Goldsmith et al, Institute of Medicine, The National Academies Press, Washington DC, 2002.

Suicide Reporting in RPMS

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On May 2, 2005 Dr. Charles Grim, Assistant Surgeon General and Director, Indian Health Service (IHS), and Dr. Jon Perez, Director of the IHS Division of Behavioral Health, appeared before the United States Senate to give testimony on the problem of suicide among American Indian/Alaska Native (AI/AN) youth and suicide prevention activities within the IHS. There were subsequent hearings later in the summer that included Dr. Richard Carmona, Surgeon General of the United States. These were the first hearings ever held by the Senate on this topic, and were called by US Senator Byron Dorgan (D-ND), Vice Chairman of the Senate Indian Affairs Committee because of concern over the high rate of suicide among AI/AN youth. The full text of Dr. Grim's testimony at the May hearing can be found on the IHS website at <http://www.ihs.gov/AdminMngrResources/legislativeaffairs/documents/2005-05-02Grim.pdf>.

IHS National Suicide Initiative and GPRA Performance Measure

In his testimony to the Senate, Dr. Grim described the IHS National Suicide Initiative that he launched in September 2003. This initiative was established to specifically address the issue of suicide prevention and supports the Department of Health and Human Services (DHHS) National Strategy for Suicide Prevention. To assist in guiding suicide prevention efforts, the IHS National Suicide Prevention Committee was established in February 2004. This committee is composed of IHS, tribal and urban program (I/T/U) behavioral health professionals, and provides direction for prevention efforts, as well as consultation to some of the specific programs that have been developed to address the issue of suicide in AI/AN communities.

Also in support of suicide prevention efforts, a Government Performance and Results Act (GPRA) performance assessment measure was developed (see box). The purpose of the GPRA suicide

indicator is to support suicide prevention by the collection of comprehensive suicide data. Results from the GPRA performance assessment are used internally within the IHS to support and guide clinical improvement activities. IHS also uses clinical performance results to demonstrate accountability to DHHS and the Office of Management and Budget, and to support budget requests for funding from Congress.

Suicide surveillance and reporting is a high priority for the Agency. It is part of the IHS Director's contract with the Secretary of HHS, and this responsibility cascades into the performance plans for Area Directors. The availability of new suicide reporting tools for all clinicians is an important first step in the process of identifying the magnitude of the need, measuring the Agency's response, and providing data upon which more effective programs can be created.

RPMS and Suicide Data Collection

In support of the goals and objectives of the Agency suicide prevention initiative and GPRA performance indicator, the Division of Behavioral Health directed the development of an electronic reporting system for I/T/U health care facilities to record the occurrence of suicide in the AI/AN communities they serve. The purpose was to generate accurate suicide data at the point of service that can be used at the local, Area, and national levels to help focus prevention efforts, identify trends, and determine program and funding needs.

The Division of Behavioral Health worked with behavioral health subject matter experts and the Office of Information Technology to develop a suicide surveillance tool in the Resource and Patient Management System (RPMS). A suicide reporting form was initially released in the RPMS Behavioral Health System (BHS) in 2003. A graphical user interface (GUI) to BHS, including the suicide reporting form, was released as a component of the IHS Patient Chart application in early 2004. The GUI format provides the user with a familiar, easy to use interface and facilitates direct provider entry of clinical information. An update of the suicide reporting form in both applications, including modifications suggested by users in the field, was released in July 2005.

In order to facilitate continuity of care, improve patient safety, and collect more comprehensive suicide data, the suicide reporting form currently found in the RPMS behavioral health applications

GPRA Suicide Performance Indicator

The purpose of the GPRA suicide indicator is to support suicide prevention by collecting comprehensive data on the incidence of suicidal behavior.

2005 Performance Indicator –
Integrate the RPMS Behavioral Health suicide surveillance tool into RPMS

2006 Performance Indicator –
Establish baseline data on suicide using the RPMS suicide surveillance tool

will soon be available RPMS-wide in PCC and the IHS Electronic Health Record. Most patients with serious suicidal ideation or attempts present first to providers in primary or emergency care. The availability of the RPMS suicide reporting form for all providers in I/T/U health care settings will promote standardized and systematic documentation of suicide events.

The Suicide Reporting Form

The suicide reporting form (SRF) allows clinicians to document incidents of suicide, including ideation with intent and plan, attempts, and completions. It captures data related to a specific occurrence, such as date and location of act, method, contributing factors, and other useful epidemiologic information.

The SRF is intended to be a data collection tool for epidemiologic reporting purposes. It is **not** intended to substitute for the normal clinical documentation of suicide-related events, or to be retained as part of the official medical record. Standards of care and patient safety dictate that providers seeing patients with serious suicidal ideation, attempts, or completions should document clinical intervention and plans for follow-up in the medical record. This is done in the usual fashion by entry onto a PCC, PCC+, or MH/SS encounter form, or by electronic entry into EHR or one of the BH applications. Additionally, the PCC and/or Behavioral Health problem list should be updated accordingly. After the appropriate clinical documentation has been done, a suicide reporting form should be completed for reporting purposes. A full SRF should take only two to five minutes to complete. Data elements collected on the SRF are shown in the inset.

To ensure privacy and confidentiality, the SRF menu option will be controlled by a security key. Only providers and data entry staff may enter and view suicide forms electronically. Data from completed forms, whether entered by a primary care or behavioral health provider, will reside in one RPMS suicide record file. Access to suicide form data via PCC Output suicide reports is also controlled by a security key. Suicide data can be analyzed locally through these RPMS reports and is also exported nationally to IHS National Programs and the Division of Behavioral Health. All exported data is in aggregate form and does **not** include any patient identifiers.

Entering Suicide Data in RPMS

The various options for entering SRF data into RPMS are designed to make this process as easy as possible, so that Agency data on suicide are as complete as they can be. Providers should complete suicide reporting forms whenever they become aware of a suicide-related event. This may

be through a direct patient encounter or via a telephone call or Emergency Department report. There is no need to wait for a patient visit to initiate the SRF, although it may be appropriate to document the suicide-related incident on a Chart Review or Telephone encounter as well.

Paper Forms

Electronic entry of clinical information directly by providers is encouraged in an effort to increase the accuracy and timeliness of clinical information, as well as to enhance patient privacy and confidentiality. With the availability of graphical user interface applications such as Patient Chart and the Electronic Health Record, direct provider entry into RPMS is easier and more intuitive. However, if needed, providers can complete the suicide reporting form on paper.

The paper suicide reporting form can be downloaded from the RPMS Behavioral Health System website (www.ihs.gov/cio/bh). This document is a one-page form accompanied by detailed instructions. Facilities are encouraged to have blank copies of the form readily available in patient care and provider office areas. Completed forms are routed to Data Entry, where the information is entered into RPMS using a new data entry mnemonic (SF). Once the data have been entered into RPMS, the paper suicide reporting forms, which are not part of the official medical record, do not need to be retained but instead should be shredded. Again, as an alternative to completing a paper form, providers are encouraged to do direct electronic entry of suicide reporting data.

Electronic Entry

Several options are available for direct electronic entry of suicide reporting form data:

1. Providers who are comfortable with the RPMS “roll and scroll” interface will be able to enter this information directly into RPMS. The “Suicide Form” menu option will enable them to enter new SRF data or to view, edit, or delete existing forms.
2. A suicide reporting form component will soon be released for sites using the IHS EHR. Exactly where this component displays within EHR will be customizable by the site. The component is similar to the suicide form in the Behavioral Health component of Patient Chart, and allows medical providers to display, edit, or enter new suicide reporting forms through a simple graphical dialog.
3. Behavioral health providers may continue to use the SRF data entry options in the Behavioral Health System

Suicide Reporting Form Data Elements	
General and Demographic	<ul style="list-style-type: none">• Name, HRN (for local use only)• Local Case Number• Reporting Provider• Date of Act• Community• Relationship Status• Employment Status• Education
Act Description and Disposition	<ul style="list-style-type: none">• Self Destructive Act• Location of Act• Previous Attempts• Lethality• Method• Substance Use• Contributing Factors• Disposition• Narrative

application as well as the Behavioral Health component of the IHS Patient Chart GUI. A screenshot of the BH GUI suicide reporting form is shown in Figure 1.

Figure 1. Screenshot of the Suicide Reporting Form

Exports and Reports

Suicide reporting form data are exported to national programs via the Behavioral Health System export. In order for this information to be available in support of the IHS suicide prevention initiative, all sites need to be certain that they are regularly executing the BHS export. It may make sense for sites to do this export along with the monthly PCC data export.

A new patch to the PCC Management Reports package will allow administrators and other authorized users to generate a variety of customized reports on suicide reporting data. These reports can be imported into spreadsheets such as Microsoft Excel®, and the data can be analyzed and charted to promote better understanding of local suicide issues.

Local Decisions

The content of the suicide reporting form and rules governing its use were developed at a national level after extensive discussion with subject matter experts, the Division of Behavioral Health, and the IHS Records Management Officer. There are still a number of decisions that will have to

be made at the local level regarding the collection of suicide data using the reporting form. Among these are:

- Which providers are authorized or expected to enter suicide data?
- Who determines allocation of the security keys?
 - Who has the security keys to run suicide-related reports?
- How far back should data collection reach – e.g., if a patient reveals an attempt three months ago, but is no longer suicidal, should this be entered?
- If sites are not already performing a monthly Behavioral Health System export, who will be responsible for this?
- How are new providers trained on the use of the suicide reporting form?

The availability and standardization of reporting for suicide and suicide-related incidents has the potential to substantially improve the quality and quantity of epidemiologic data about this serious public health problem. These data will provide important information to guide program development and evaluation. More detailed knowledge about associated conditions and contributing factors may lead to new interventions that can decrease the future incidence of suicide in Indian Country.

Facilities are encouraged to develop policies mandating the use of the electronic or paper suicide reporting form, and providers in all disciplines are encouraged to take the time to complete the SRF whenever they become aware of a patient who has expressed serious suicidal ideation with intent, or of a suicide attempt or completion. For more information on the activities of the IHS National Suicide Prevention Committee or the use of the RPMS suicide reporting form, please refer to the contact information below.

Contacts

The IHS National Suicide Prevention Committee contacts are Marlene Echohawk, PhD (Marlene.Echohawk@ihs.gov); Peter Stuart, MD (Peter.Stuart@ihs.gov); and Kira LeCompte, MS (Kira.LeCompte@ihs.gov).

For questions about the RPMS Suicide Reporting Form, contact Denise Grenier, MSW, LCSW (Denise.Grenier@ihs.gov).

Development of a Symbiotic Relationship with a Remote First Nations Community Leading to a Collaborative School-Based Oral Health Program

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“See us, hear us, respect us, work with us”

Health Authorities Handbook on Aboriginal Health

The Need

The Kirby Commission, in its report on the status of the health care system in Canada, stated that “the health of Aboriginal Canadians is a national disgrace. There is a ... completely unacceptable large gap in health indicators between Aboriginal and non-Aboriginal Canadians.”¹ Aboriginal people in Canada have significantly higher incidences of preventable health problems, including diabetes, heart disease, dental caries, injuries, premature labor, and tuberculosis, compared with the remainder of Canada’s population. Although Canada’s health status scores in the top five countries in the world, the health status of Canadian Aboriginals ranks 63rd, below that of Mexico and Thailand.² One of the trainees in our Pediatric Residency program at the University of British Columbia stated, “I’ve been interested in international child health for some time now, but I think that there is a third world situation at our very doorstep in Canada.” The need to act to rectify these differences has been acknowledged by individuals, groups, and all levels of government to be an ethical imperative. Aboriginal elders want to ensure that their children are healthy, and are actively seeking ways to achieve that goal. As noted in the report of the Kirby Commission, “Research is perhaps the most important element that will help improve the health status of Aboriginal Canadians.”³

Aboriginal Health Issues

There are many Aboriginal health issues, ranging from the simple to the huge and complex. Some of the issues that have been identified in the literature are early childhood development, tobacco, alcohol and drugs, human immunodeficiency virus, diabetes, the burden of hypertension and renal disease, and injuries (intentional and unintentional).⁴ Several of the greatest discrepancies in health indicators are being successfully addressed: infant mortality has dropped

from four times the British Columbia average to nearly the same; life expectancy is increasing; and mortality due to almost all causes is dropping, although alcohol-related deaths and unintentional falls are becoming more prevalent.⁴

The strong desire of most or all Aboriginal communities to improve the health of their children is the platform upon which our collaborative program was developed. Although there are many urgent adult Aboriginal health issues, we believe that by first working with communities to address the health issues of their children (starting with antenatal care and moving on to nutrition, oral health, vaccination, infection, injury prevention, and juvenile diabetes), the groundwork can be laid for the communities to network with teams with adult expertise.

The Barriers

Well-recognized and often long-established barriers inhibit collaborative health initiatives and research into health care priorities relevant to rural and remote Aboriginal communities. These include:

- Distrust between Aboriginal people and “outsiders.”
- A lack of capacity within the communities to develop relevant health care initiatives or undertake necessary research independently.
- A very reasonable desire not to be “guinea pigs.”
- Difficult access and cost of travel.
- Small numbers (sample size), with the corollary that standard research methodology is often not applicable or difficult to apply, or does not fit the needs or the vision of the community.

The best way of breaking down these barriers is to have Aboriginal people as the driving force behind the initiatives that are developed and all the research done in their own communities. This is best achieved by:

- Ensuring the community is involved in identifying health priorities.
- Using the expertise of a University or other qualified partner to define the health care question and potential answers that address the community’s priority, and then mutually setting achievable goals to implement and evaluate the “answer” that the community has selected.

- Where research is required, selecting robust research design methods that are acceptable in a cultural, ethical, and practical context.
- Having the community actively involved in the conduct of the research and data collection; participate in the analysis and interpretation of the data, and take ownership of the data and results.
- Presenting the results to both the Aboriginal and scientific communities.
- Implementing programs collaboratively in the community based on the results of the research.

Achieving independently designed and conducted research in remote Aboriginal communities is an important long-term goal. The Assembly of First Nations has identified three guiding principles for research and the ongoing development of research capacity in First Nations communities.³ These principles were designed to guide research in a direction and at a pace that the community itself considers appropriate.

- Knowledge must be recognized as a legitimate source of power: the institutional capacity to direct and control information to determine policy, as well as implement and evaluate programs, is essential for First Nations and Inuit. This process is dependent on the power to develop and control databases, research, and the analytic process that links health information to policy and program outcomes.
- Respect for the legitimate aspirations of self-determination by First Nations and Inuit: autonomous institutional development, a fundamental right, can only occur in the context of self-determination. Thus to be consistent with conditions for success, research and evaluation processes must develop under such conditions. External control and manipulation of health information, including research, must be recognized as a reason for the lack of compliance (resistance) by First Nations and Inuit in health information gathering.
- Ownership, control, and access to research and evaluation processes and outcomes have emerged as a central area of concern. The development of First Nations health information systems and their use cannot succeed without participation in, and ownership by, the First Nations community.

In summary, First Nations and Inuit communities have stated their interest in developing skills and knowledge about conducting research, but many barriers and insensitivity remain.

Oral Health – The Background Rationale

Surveys of dental health among Aboriginal children in Canada using scales such as the Decayed, Missing, and Filled Teeth (DMFT) score indicate that Aboriginal children have 2 to 3 times as many decayed, missing and filled teeth compared

with other populations.⁵⁻⁷ A Health Canada report from August 2000 indicates that dental decay rates range from 3 to 5 times greater than in the non-Aboriginal Canadian population.⁸ Recent statistics from BC First Nations children are equally troubling. A 1999 survey of dental health among children aged 18 to 36 months in a First Nations community in Southern BC found that 31 of 35 (89%) children had at least one carious lesion, and 14% of primary tooth surfaces were decayed. Examination of similarly-aged children in a First Nations community in the Cariboo region revealed that, on average, each child had about 5 decayed primary teeth, and only 21% of children were cavity-free.⁹ Causes include giving bottles of milk or apple juice to babies to soothe them, high-sugar diets, and poor or irregular access to dental care. Where poor oral health is present, concern now exists that this chronic inflammatory process may predispose affected individuals to a higher incidence of diabetes, coronary artery disease, and even premature labor. This makes the issue of oral health all the more pressing in aboriginal children.

A variety of possible interventions that could be implemented in the community were identified and presented to the Health Director and Band Council in the community. These included:

- Use of traditional soothing methods (e.g., cradle songs) for infants.
- Fluoridation of the water.
- School-based instruction to improve knowledge and practices around oral health using brush-ins and topical fluoride varnish and/or rinses.
- Measures to address dietary deficiencies and detrimental practices in the community as a whole.

Our Collaborative Partnership

In our collaborative partnership, an oral health program was the first initiative mutually agreed upon, and the process and method of delivery were selected by the community with which we worked. The rationale was that:

- This was a project involving children.
- Children's oral health is recognized to be a health issue of major concern.
- Oral health also has deeper health relevance because of the connection proved by prior research between poor oral health and a higher incidence of preterm labor, diabetes, and heart disease in later life.
- There was a good prospect of success.
- Evaluation of the program would indicate if it was effective in the short term.
- The program delivery could be school-based and thus include all children of school age in the community.
- The University contribution could include involvement of pediatric and dental trainees and faculty, thus providing a valuable learning opportunity for these individuals from our 'community' also.

The Roadmap and Process

In collaboration with the community of Gitga'at (Hartley Bay), we developed a roadmap for establishing an effective partnership with an Aboriginal community. Once developed, this partnership was successfully used to identify the need for and introduce an oral health promotion program. The roadmap followed these steps:

Year 1

- Developed a working relationship with each participating community.
- Worked collaboratively with each community to identify health care priorities, and select one or more for initial program development.
- A series of visits were made by team members to the community to discuss the possibility of introducing medical service through partnership with our pediatric and family practice residency programs to meet a community-defined health care need. With interest shown, the collaborative relationship was formalized.
- First, discussions were conducted with the contact person identified through the referral process, in our case, the Community Health Director. This included preliminary discussions about the health issues of concern to the community.
- The contact person was asked to raise the proposal with the council, and to identify health issues of concern. From these, a “manageable” problem was selected as the first concern to address (oral health).
- Next, a team of “elders” from UBC, including the team leader, the project manager, and a clinical specialist visited the community.
- We then worked with the community’s designated representative to design a program to address the problem of poor oral health. Options for programs were presented to the council, and the council selected a school-based brush-in combined with a fluoride rinse program. The school principal and teachers were involved in the design of the program.
- The community was supported in obtaining funding from Health Canada’s Brighter Futures and other funding agencies. The community was then invited to become a Clinical Teaching Facility of the Faculty of Medicine.
- Primary care physicians and other health care providers (e.g., dentists) who usually attend the band members were sent a letter describing the project and assuring them that there was no intent to decrease the utilization of their services or interfere in their relationship with their patients.

Year 2

- Provided presentations and information to the community members on health care issues and health care/science careers.

- Teams consisting of 2 medical residents and a faculty supervisor visited the community for 2 - 3 days approximately every 6 to 8 weeks, implementing and supporting the oral health program. The team worked with the nurses, the school, and the council to maintain the program, and the residents made health promotion, injury prevention, science careers, and general interest presentations to the school, the parents, and the elders. The community members and the council were introduced to the concept of the importance and relevance of research through informal discussions and presentations.

Subsequently, building on the success of this “Brighter Smiles” program, the community has identified the need for a vaccination program and a nutrition assessment program, both of which have been developed and delivered collaboratively. In addition, the partnership has led to research projects on oral health education¹⁰ and nutrition education for adult members of the community, a chart review on antibiotic use, as well as collaboration on submissions for local, national, and international research funding.

We believe that our model, which has already successfully established an effective and popular oral health program for children and led subsequently to participatory research in this community, can be used to develop similar programs and contribute to the building of research capacity in other remote Aboriginal communities.

Year 3

During the third year, we worked collaboratively with the community to evaluate the intervention and identify opportunities for change or new directions. We are maintaining service delivery in Hartley Bay and have accepted an invitation to expand the program to a second, larger community and have begun discussions with a third.

The Oral Health Program

The oral health program consisted of the following:

- Daily school-based brush-ins after lunch each day, supervised by teachers and/or the Community Health Director.
- Weekly fluoride rinse.
- Fluoride varnish applications three times in 10 days every four months for those under nine years of age.
- Dental health anticipatory guidance by residents during well-baby and well-child visits.
- Classroom presentations by residents about a variety of health topics, including oral health.

The program is being evaluated on an ongoing basis. Outcome measures include enrollment, incidence of new caries, and independent observation by the government dentist who visits the community each year. These observations include subjective

evaluation of oral hygiene and estimated “time required to treat” for restorations (amalgam and composite resin “fillings” and stainless steel crowns), extraction of primary teeth, and preventive therapy (cleaning, fluoride treatment, fissure sealants).

Results

The program is still in progress. One hundred percent of the children remain enrolled, and pride in their success and motivation of each other is very evident. The community can see a marked improvement and remains very positive about the program. Teachers award prizes weekly, monthly, and annually for participation, and the school maintains a wall of photographs of children who are caries free as a measure of their success. The ultimate effectiveness of the program will be determined from the repeat oral exams over the three years following initial assessment. At base-line, only 8% of children were caries free in the Kindergarten to Grade 12 age group, with 31% caries free in the pre-Kindergarten age group.

The incidence of new caries has dropped significantly. At the end of the first year, 41% of the children had no new cavities. Following two years of the program, the government dentist reported that the majority of the children had visibly better oral hygiene. The “time required to treat” for restorations decreased significantly from 117.6 for an n of 58 in 2002 to 68.4 for an n of 49 in 2004 ($\chi^2 = 25.54$, $p < 0.001$). The “time required to treat” for preventative therapy decreased from 421 (n = 55) to 301 (n = 49) ($p = 0.025$). There was no difference in the “time required to treat” for extraction of primary teeth ($\chi^2 = .093$, $p < 1.00$).

Discussion

We report the collaborative process that led to a partnership between a remote First Nation’s community and a university pediatric residency program, and from which a successful school-based program has been developed. Dialogue and mutual respect led to the community identifying the oral health of their children as the major issue that they wished to address through an intervention program. The role of the university was to provide the intervention options available to the community, and based on their choices to aid in implementing and evaluating an intervention program. Our partnership proved to be more successful than either group anticipated. The visits of our trainees are eagerly anticipated by both the trainees and the community. Both groups have learned valuable lessons from one another. The oral health program has led to community requests for other initiatives, notably a nutrition survey and an immunization program that now has 100% of the children fully immunized.

The fact our partnership has thrived and expanded is due in large part to the success and popularity of its central component, the oral health program. This choice to address oral health was driven by identified community need and also provided a realistic and achievable goal. This supports the philosophy that achieving a small success and then building on

it will promote trust and open other avenues of collaboration. Success also leads to increased participation, higher energy level, and more commitment from both sides. If an issue is undertaken which is either too big or emotionally charged, it may set all participants up for failure and discouragement.

The ongoing community commitment to the oral health project, the evidence from interim data of a major reduction in the incidence of new caries, and independent observations from the government dentist that dental health has improved indicate that this is a worthwhile and effective program. However, it was evident at the recent international conference on Inuit and Native American Child Health held jointly with the 17th Annual IHS Research Conference that to date in North America, success in the area of caries reduction in aboriginal children has been elusive. Our program may be first to document efficacy.

We offer our ‘road map’ for collaborative partnership and the oral health program that we are delivering currently, in the hope that others will consider using this approach to address the most common infectious disease and chronic health problem experienced by aboriginal children.

References

1. The Standing Committee on Social Affairs, Science and Technology. The Health of Canadians – the Federal Role, Final Report. Volume 6, Recommendations for Reform. Government of Canada, Ottawa, October 2002.
2. World Health Organization data, as quoted by Dr. Jeff Reading: http://www.hc-sc.gc.ca/english/for_you/hpo/amyot/4thannual/transcripts.html.
3. Our Nations on the Edge of a New Century: BC First Nations Regional Health Survey: First Nations’ Summit Chief’s Health Committee, March 2000.
4. Health and Well Being of Aboriginal People in British Columbia, *Provincial Health Officer’s Annual Report*, 2001.
5. Bedford WR, Davey KW. Indian and Inuit dental care in Canada; the past, the present and the future. *J Can Dent Assoc* 59(2):130-2, 1993.
6. Harrison RL, Davis DW. Caries experience of Native children of British Columbia, Canada, 1980-1988. *Community Dent Oral Epidemiol* 21(2):102-7, 1993.
7. Health Canada: A Statistical Profile on the Health of First Nations in Canada. Available at: http://www.hc-sc.gc.ca/fnihb-dgspni/fnihb/sppa/hia/publications/statistical_profile.pdf. Accessed on the Internet, May 2003.
8. FNIHB Community Programs. *1999-2000 Annual Review*, Health Canada, Ottawa.
9. Harrison R, White L. A community-based approach to infant and child oral health promotion in a British Columbia First Nations community. *Can J Community Dent* 12:7-14; 1997.
10. Harrison R, Macnab AJ, Duffy D, Benton, D. Brighter Smiles. Health promotion and service-learning in a remote first nation’s community. *Can J Pub Health* (in press).

Clinical Consultant's Newsletter (Volume 3, No. 8, August 2005) available on the Internet at <http://www.ihs.gov/MedicalPrograms/MCH/M/OBGYN01.cfm>. We wanted to make our readers aware of this resource, and encourage those who are interested to use it on a regular basis. You may also subscribe to a listserv to receive reminders about this service. If you have any questions, please contact Dr. Neil Murphy, Chief Clinical Consultant in Obstetrics and Gynecology, at nmurphy@scf.cc.

OB/GYN Chief Clinical Consultant's Corner Digest

Abstract of the Month

Open access can work for any type of practice. It is the wave of the future.

Objective: Appointment delays impede access to primary health care. By reducing appointment delays, open access (OA) scheduling may improve access to and the quality of primary health care. The objective of this pilot study was to assess the potential impact of OA on practice and patient outcomes by using pilot-study data from four North Carolina primary care practices.

Methods: We conducted an interrupted time-series pilot study of four North Carolina primary care practices (two family medicine and two pediatric practices) participating in a quality-improvement (QI) collaborative from May 2001 to May 2002. The year-long collaborative comprised 25 practices and consisted of three 2-day meetings led by expert faculty, monthly data feedback, and monthly conference calls. Our main outcome measures were appointment delays, appointment no-shows, patient satisfaction, continuity of care, and staff satisfaction during the 12-month study period.

Results: Providers in all four practices successfully implemented OA. On average, providers reduced their delay to the third available preventive care appointment from 36 to 4 days. No-show rates declined (first quarter [Q1] rate: 16%; fourth quarter [Q4] rate: 11%; no-show reduction: 5% [95% confidence interval: 1%, 10%]), and overall patient satisfaction improved (Q1: 45% rated overall visit quality as excellent; Q4: 61% rated overall visit quality as excellent; change in satisfaction: 16% [95% confidence interval: 0.2%, 30%]). Continuity of care followed a similar pattern of improvement, but the change was not statistically significant. Staff satisfaction neither improved nor declined.

Conclusions: This pilot study suggests that primary care practices can implement OA successfully by using QI-collaborative methods. These results provide preliminary evidence that OA may improve practice and patient outcomes in primary care. These analyses should be repeated in larger groups of practices with longer follow-up.

Bundy DG, et al. Open access in primary care: results of a North Carolina pilot project. *Pediatrics*. 2005 Jul;116(1):82-7.

OB/GYN CCC Editorial comment

Actually "Open Access" to care is more than a wave of the future. Open access techniques are used successfully in many Indian health system sites right now, and open access techniques should be used throughout the entire Indian health system. There is extensive experience with open access techniques at ANMC dating to the middle and late 1990s, particularly at Southcentral Foundation.

Other resources

Murray M, Bodenheimer T, Rittenhouse D, Grumbach K. Improving timely access to primary care: case studies of the advanced access model. *JAMA*. 2003 Feb 26;289(8):1042-6.

Pierdon S, et al. Implementing advanced access in a group practice network. *Fam Pract Manag*. 2004 May;11(5):35-8.

From Your Colleagues

Miles Rudd, Warm Springs, Oregon

Relative value of physical exam of the breast as a screening tool. Miles Rudd at Warm Springs raised the issue of the relative value of physical examination of the breast in cancer screening. Here are some brief bulleted points from Dr. Eve Espey's presentation on Breast Cancer at the 2005 IHS/ACOG Obstetric, Neonatal, and Gynecologic Care Postgraduate Course. A more complete discussion appears below.

Breast self exam (BSE) Canadian Task Force on Prevention

- Fair evidence of no benefit
- Good evidence of harm
- Overall fair evidence that routine teaching of BSE should be excluded from the annual exam
- D recommendation

USPSTF: 2002, Should we recommend BSE?

- BSE: insufficient evidence to recommend for or against
- I recommendation

Studies evaluating BSE

- 2 RCTs, 1 quasi RCT, 3 case-control studies

- No difference in breast cancer mortality
- No difference in stage of cancer at diagnosis
- More provider visits (8% vs. 4%)
- More benign biopsies

ACOG Practice Bulletin: Breast cancer screening, April, 2003

- Despite a lack of definitive data for or against breast self-examination, breast self-examination has the potential to detect palpable breast cancer and can be recommended
- Costs of BSE \$700 per competent frequent self-examiner
- Opportunity cost: limited time for counseling
- Anxiety, worry, depression

Summary

- Take down your shower card for BSE
- Encourage mammography
- Work up palpable masses
- Don't worry quite so much

OB/GYN CCC Editorial comment

The data show that the foundation of any breast cancer screening effort is a comprehensive mammography-based program. The history and physical examination are important adjuncts to screening, but should not delay, or become barriers to mammography. An equally important public health systems process is a robust follow-up system. The RPMS Women's Health Program, or other tracking system software packages, can be critical to maintaining adequate screening follow up.

What is the suggested approach in the Indian Health Service Manual? What are national benchmarks? The Indian Health Service Manual approach is based on mammography and is compatible with national benchmarks. The article referenced below is a good summary of the national benchmarks, although is not entirely internally consistent. The first part of the article articulates the limitations of the data on clinical breast exam (CBE). The second part (their recommendations) is essentially a primer on performing the extensive Mammacare exam. Although Mammacare has been shown to find more lesions during the lengthy exam, the increased detection of non-malignant lesions does not improve breast cancer outcomes.

Saslow D, et al. Clinical breast examination: practical recommendations for optimizing performance and reporting. *CA Cancer J Clin.* 2004 Nov-Dec;54(6):327-44.

Hot Topics Obstetrics

Trial of Labor After Cesarean: Evidence-Based Guidelines. The American Academy of Family Physicians Commission on Clinical Policies and Research convened a panel to systematically review the available evidence on trial of

labor after cesarean (TOLAC) using the Agency for Healthcare Research and Quality "Evidence Report on Vaginal Birth After Cesarean (VBAC)." The panel's objective was to provide an evidence-based clinical practice guideline for pregnant women and their families, maternity care professionals, facilities, and policy makers who care about trial of labor and maternity care for a woman with one previous cesarean. The recommendations are as follows:

Recommendation 1: Women with one previous cesarean delivery with a low transverse incision are candidates for and should be offered a trial of labor (TOL). (Level A)

Recommendation 2: Patients desiring TOLAC should be counseled that their chance for a successful vaginal birth after cesarean (VBAC) is influenced by the following: (Level B)

Positive factors (increased likelihood of successful VBAC)

Maternal age <40 years

Previous vaginal delivery (particularly previous successful VBAC)

Favorable cervical factors

Presence of spontaneous labor

Non-recurrent indication that was present for previous cesarean delivery (CD)

Negative factors (decreased likelihood of successful VBAC)

Increased number of previous CDs

Gestational age >40 weeks

Birthweight >4,000 g

Induction or augmentation of labor

Recommendation 3: Prostaglandins should not be used for cervical ripening or induction, as their use is associated with higher rates of uterine rupture and decreased rates of successful vaginal delivery. (Level B)

Recommendation 4: TOLAC should not be restricted only to facilities with available surgical teams present throughout labor, because there is no evidence that these additional resources result in improved outcomes (Level C). At the same time, it is clinically appropriate that a management plan for uterine rupture and other potential emergencies requiring rapid cesarean section should be documented for each woman undergoing TOLAC (Level C).

Recommendation 5: Maternity care professionals need to explore all the issues that may affect a woman's decision, including issues such as recovery time and safety (Level C). No evidence-based recommendation can be made regarding the best way to present the risks and benefits of TOLAC to patients.

Borgmeyer C. American Academy of Family Physicians. Guideline showcases AAFP's commitment to evidence-based, patient-centered care - Trial of Labor After Cesarean (TOLAC), Formerly Trial of Labor Versus Elective Repeat Cesarean Section for the Woman With a Previous Cesarean Section. *Annals of Family Medicine.* 3:378-380 (2005).

OB/GYN CCC Editorial comment

This document is helpful as it more strictly applies the available scientific literature, rather than relying as heavily on tort liability as a premise. The Indian health system has had extensive discussions about emergency vaginal delivery in rural settings. As symptomatic uterine rupture is a relatively rare event, it is highly recommended that each center offering vaginal delivery have periodic drills on various other emergency delivery scenarios to assure that the whole labor and delivery system is capable of a timely response.

Features

Case Manager's Corner (RN; In lieu of a Case Manager submission, Reynaldo Espera, from ANMC Labor and Delivery submitted this)

Stress and verbal abuse in nursing.

Results: Respondents reported that the most frequent source of abuse was nurses (27%), followed by patients' families (25%), doctors (22%), patients (17%), residents (4%), other (3%) and interns (2%). Of those who selected a nurse as the most frequent source, staff nurses were reported to be the most frequent nursing source (80%) followed by nurse managers (20%).

Conclusions: Verbal abuse in nursing is quite costly to the individual nurses, the hospitals, and the patients. Nurses who regularly experience verbal abuse may be more stressed, may feel less satisfied with their jobs, may miss more work, and may provide a substandard quality of care to patients.

Rowe MM, Sherlock H. Stress and verbal abuse in nursing: do burned out nurses eat their young? *J Nurs Manag.* 2005 May;13(3):242-8.

OB/GYN CCC Editorial comment

This is an important article that should serve to remind us that there is no role for verbal abuse in the health care setting. As over one-half of the sources of the verbal abuse are fellow health care workers, this problem can be remedied with improved communication with our colleagues.

Medical Mystery Tour

Follow-up of two positive blood cultures found in a postpartum patient with a fever.

A little refresher from last issue. This 22 year old G1 P0 presented in active labor at 40 weeks gestation after a benign prenatal course that was significant only for a positive perineum and rectal culture for beta streptococcus group B screen at 36 weeks and a weight gain of over 50 pounds with a normal glucose challenge test. The patient had a normal spontaneous delivery over a large 4th degree laceration. There was also an extensive left perineal laceration with avulsion. The patient had a standard repair of the 4th degree laceration and a right vulvar skin flap closure of the left perineal laceration in the delivery room. The immediate post partum course was unremarkable.

The patient returned on postpartum day #5 with a temperature of 101.9 degrees F, a tender uterus with an intact perineum, and a WBC of 13.3K. The patient was rehospitalized for endometritis and treated with metronidazole and ampicillin/sulbactam. She defervesced and was discharged home again on post partum day #8. The patient was called back into the hospital within hours of leaving when it was noted that two of her blood cultures had become positive. What was the organism? What was the source?

The Answer

The preliminary findings of gram negative rods isolated in both anaerobic bottles were called STAT to the provider. Subsequent identification revealed *Fusobacterium mortiferum* in both bottles. Anaerobes account for 2 to 5 percent of blood culture isolates from patients with clinically significant bacteremia, but the rate is decreasing reflecting the frequent use of anti-anaerobic antibiotics. The most common blood culture isolates among anaerobes are the *B. fragilis* group, which account for 60 to 80 percent. A review of the suspected portal of entry for 855 episodes of bacteremia involving anaerobes indicated an intraabdominal source in 52 percent, the female genital tract in 20 percent, the lower respiratory tract in 6 percent, the upper respiratory tract in 5 percent, and soft tissue infections in 8 percent.

Fusobacterium is one of the anaerobic bacteria species often involved in a variety of infections of the oral cavity and adjacent structures, including serious infections with suppurative (septic) thrombophlebitis of the jugular vein. On the other hand, *fusobacterium* sp. are detected in amniotic fluid in preterm labor more commonly than other anaerobes. *Fusobacterium* burrow through amnion tissue rapidly and sometimes are present in amnion tissue in large numbers, as if penetrating between the amnion epithelial cells. Large numbers of *fusobacterium* have been identified in Wharton's jelly. This suggests a peculiar propensity for these microorganisms to penetrate amnion tissue, which also covers the umbilical cord. *Fusobacterium* produce a variety of toxins, some of which are extraordinarily potent in stimulating cytokine formation in mononuclear phagocytes. In the setting of premature rupture of membranes, it has been hypothesized that *fusobacterium* penetrate the fetal membranes after the tissues are exposed to these microorganisms in the cervical/vaginal fluid.

The Rest of the Story

The patient was treated with IV ampicillin/sulbactam plus metronidazole intravenously and was discharged on oral metronidazole and amoxicillin/clavulanate within two days of the positive blood cultures. The patient initially did well as an outpatient, but had to be readmitted with a fever and a breakdown of her labial repair six days later. The admission examination revealed that the 4th degree laceration also

developed a small fistula. The patient was initially treated with a broad spectrum anaerobic regimen IV, and subsequently underwent debridement and a rectovaginal fistula repair two days later.

Although the source cannot be known with complete certainty, due to the mixed microbiology of the genital system, it appears the source was the perineal and 4th degree lacerations, and not endomyometritis as suspected with the patient's first postpartum admission. The rectovaginal fistula repair was well healed eight weeks later.

Have a case you would like to discuss in the Medical Mystery Tour? Please contact nmurphy@scf.cc.

Navajo News from Jean Howe, Chinle

Is the patch more dangerous than the pill? "More fatalities than expected occur from birth control patch." On July 15th, an Associated Press article with this alarming title was published in one of our local newspapers, *The Gallup Independent*. It reported that there was a three-fold increased risk of death with contraceptive patch use, as compared to oral hormonal contraceptive use, based on cases reported to the FDA. They cite the following risks:

Risk group	Risk of non-fatal blood clot	Risk of death
Non-smokers, <35 years old, on oral contraceptive pills	1-3 in 10,000	1 in 200,000
Non-smokers, <35 years old, using contraceptive patch	12 in 10,000	3 in 200,000

The article also states that two blood clots occurred in the 3,300 patch users who participated in clinical trials prior to FDA approval. The article was quite dramatic, including several touching vignettes of young women who died unexpectedly while using the patch. It offers other death rates for comparison, but only in a somewhat confusing table, and not in the text itself. These include a death rate of 28 per 100,000 per year for pill users under 35 who smoke, 143 per 100,000 for pill users 35 - 44 years old who smoke, 10 per 100,000 for women at 20+ weeks gestation, and 100 per 100,000 for motorcycle riders. The article does not state a risk for non-fatal blood clots associated with pregnancy.

This inflammatory article is another example of non-evidence based data being presented to the public in a sensational manner. The FDA reports are collected to look for unanticipated adverse outcomes associated with medication use that were not identified in studies conducted prior to FDA approval. Their collection is important, but the information must be interpreted with caution. Importantly, the AP article apparently bases its risk calculations on a denominator of

800,000 patch users in 2004. Ortho states that the actual number of patch users was closer to 2,000,000 in 2004; clearly that would change the risk calculations dramatically.

This is a perplexing situation. Women's health providers wouldn't want to ignore potentially important safety information about the patch. However it is not clear that these spontaneously generated FDA reports actually represent important new safety information. It is our duty as providers to provide our patients with the best evidence-based information available and protect them from media hysteria. The available data show that hormonal contraception does pose a slightly increased risk of blood clots, regardless of route (pill, patch, or vaginal ring). This risk is much less than the risk associated with pregnancy. For women who find it difficult to use other methods reliably, the contraceptive patch remains an excellent method of birth control. If anything, this article illustrates the need to encourage smoking cessation in all hormonal contraception users under 35 and work with smokers 35 and over both to find acceptable alternative methods of birth control and to quit smoking.

Perinatology

George Gilson, Maternal Fetal Medicine, ANMC

Glyburide for gestational diabetes in a large managed care organization.

Results: In 1999 through 2000, 268 women had GDM diagnosed and were treated with insulin; in 2001 through 2002, 316 women had GDM diagnosed, of which 236 (75%) received glyburide.

Conclusion: In a large managed care organization, glyburide was at least as effective as insulin in achieving glycemic control and similar birth weights in women with GDM who failed diet therapy. The increased risk of preeclampsia and phototherapy in the glyburide group warrant further study.

Jacobson GF, et al. Comparison of glyburide and insulin for the management of gestational diabetes in a large managed care organization. *Am J Obstet Gynecol.* 2005 Jul;193(1):118-24.

Overweight and obese in gestational diabetes: the impact on pregnancy outcome.

Results: Four thousand and one women were enrolled. Obese women who achieved targeted levels of glycemic control had comparable pregnancy outcomes to normal weight and overweight women only when they were treated with insulin.

Conclusion: In obese women with BMI >30 with GDM, achievement of targeted levels of glycemic control was associated with enhanced outcome only in women treated with insulin.

Langer O, et al. Overweight and obese in gestational diabetes: the impact on pregnancy outcome. *Am J Obstet Gynecol.* 2005 Jun;192(6):1768-76.

The full CCC Corner is available online at <http://www.ihs.gov/MedicalPrograms/MCH/M/OBGYN01.cfm>.

This is a page for sharing “what works” as seen in the published literature as well as what is being done at sites that care for American Indian/Alaskan Native children. If you have any suggestions, comments, or questions, please contact Steve Holve, MD, Chief Clinical Consultant in Pediatrics at sholve@tcimc.ihs.gov.

IHS Child Health Notes

Quote of the month

“You don’t have to be unfair to be tough.”

Barney Frank, US Congressman

Articles of Interest

American Indian and Alaska Native Children: Findings from the Base Year of the Early Childhood Longitudinal Study, Birth Cohort (ECLS-B)

<http://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2005116>

This ED TAB provides descriptive information about American Indian and Alaska Native (AI/AN) children born in the United States in 2001. It presents information on characteristics of their families, on children’s mental and physical skills, on children’s first experiences in childcare, on the fathers of these children, and on their prenatal care. The report profiles data from a nationally representative sample of children at about nine months of age both overall, and for various subgroups (e.g., male and female, AI/AN children living in different types of families, AI/AN children living in poverty). This report tells us that about one-third of AI/AN children live in poverty (34 percent), about one-third live in households where the mother has less than a high school education (34 percent); three-quarters live in households with two parents, and about 1 in 10 (11 percent) were born to teenage mothers. Nonetheless, AI/AN children at about nine months of age do not perform significantly differently from the general population of children in terms of early mental and physical skills, such as exploring objects in play, babbling, eye-hand coordination and pre-walking skills.

Editorial Comment

The National Center for Education Statistics is within the Department of Education. They have the ambitious task of completing a longitudinal study of early childhood development. The birth cohort is from 2001 and involves a sampling of all races and ethnic groups. New reports are expected every few years. This report provides a wealth of data about AI/AN infants that can be used for reference.

I would like to welcome two new contributors to our child health notes. Dr. Rosalyn Singleton of Anchorage, Alaska, will be providing a monthly update on vaccinations and pediatric infectious disease issues. Dr. Douglas Esposito from Fort Defiance, Arizona, will provide a monthly review of new

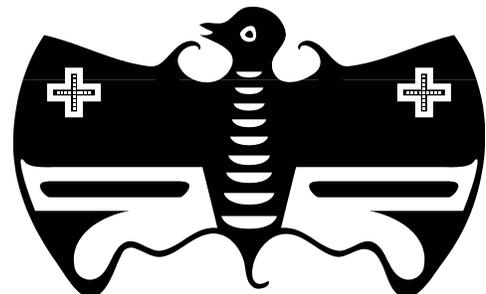
articles relating to AI/AN health problems. I expect they will add knowledge and breadth, and possibly wit, to these pages. Please let me know if there are other topics you would like to see discussed in these pages by our consultants.

Infectious Disease Updates

Rosalyn Singleton, MD, MPH

Pertussis Prevention: What’s in the Forecast? Although DTaP vaccine has nearly eliminated diphtheria and tetanus in the US, pertussis infections have increased dramatically, from a low of 1,020 cases in 1976 to more than 19,000 cases in 2004 – a 40 year high. Approximately 36% of cases occur in adolescents; however, 90% of pertussis deaths occur in young infants who are often exposed to pertussis from older siblings. The pertussis immunity induced by early childhood vaccinations wanes after about six years, leaving adolescents and adults susceptible to pertussis.

In 2005 two companies received FDA licensure of Tdap vaccines. BOOSTRIX® (GlaxoSmithKline) is licensed for 10 - 18 year olds, while Adacel® (Sanofi Pasteur) is licensed for persons 11 - 64 years of age. The Tdap vaccines have the same amount of tetanus and diphtheria toxoid as Td, but with one-fourth the amount of the pertussis antigens found in DTaP vaccines. Both vaccines elicit superior immune responses to that seen in children with DTaP and with adverse events similar to currently available Td vaccine. In June 2005 the ACIP recommended that adolescents 11 - 18 years of age be given a single Tdap in place of the Td booster. The full recommendations and VFC coverage will be published in the next few months. The ACIP expects to phase in adult Tdap indications over the next few years. Tdap has been added to the RPMS Immunization Table, and Tdap will forecast in adolescents 11 - 18 years of age in the next Immunization package version (Winter 2005).



Recent literature about American Indian/Alaskan Native Health

Doug Esposito, MD

Outcome evaluation of a public health approach to suicide prevention in an American Indian tribal nation. *Am J Public Health*. 2005;95(7):1238-44. http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=pubmed&dopt=Abstract&list_uids=15933239&query_hl=3.

- Evaluation of a 15 year community-based mental health intervention targeting adolescent suicide on a rural New Mexico Athabaskan tribal nation.
- Target population was primarily aged 10 - 19 years, but 20 - 24 year olds were targeted as well later on in the project.
- Other targets included broad-based community education and awareness of suicide, in addition to other related behaviors (child abuse and neglect, family violence, trauma, and alcohol and substance abuse).
- A reduction in suicide attempts and gestures, but not successful suicides, was steadily documented over the course of the evaluation period (1988 - 2002).
- Durability of effect of the intervention was seen as the target population aged; i.e., reductions in suicidality generalized to older non-intervention age groups over time as intervention subjects advanced into the older age groups.
- The investigators attribute the success of the program to its integrated, comprehensive, community-based public health approach.
- Substantial growth in mental health services available to the target community was achieved over time, and was likely a large part of the success of the project.

Editorial Comment

Suicide is the second leading cause of death for American Indians and Alaska Natives (AI/AN) age 15 - 24 years, and represents one of the most pressing health problems faced by AI/AN communities today. AI/AN suicide rates are more than twice those suffered by the general population. Unfortunately, mental health and related services for the most vulnerable segments of our population are significantly underfunded, and therefore, limited.

The authors report on a successful public health-oriented suicide prevention program conducted on an American Indian reservation. It appears that their success was in part attributable to a significant bolstering of the mental health services available to the target community. It will be a challenge for most of us who work with AI/AN populations to replicate these successes, due to the difficulty of achieving similar expansions in mental health services under the current environment of extraordinary underfunding.

Pediatric Locum Tenens Service

The AAP Committee on Native American Child Health has developed a website to help IHS and 638 contract sites find pediatric locums. The website has an on-line form you can fill out describing your locum tenens needs and which will be posted for AAP members. Go to www.aap.org/nach.

In addition, the AAP is interested in helping sites find pediatricians to fill permanent vacancies. Contact AAP staff member Sunnah Kim at (847) 434-4729.



Clinical Reporting System (CRS) Update

Stephanie Klepacki, CRS Project Coordinator, ITSC, Albuquerque, New Mexico; and Theresa Cullen, MD, MS, National Medical Informatics Consultant, OIT, Tucson, Arizona

CRS 2005 Software

The Clinical Reporting System 2005, Version 5.1 software was released nationally on June 16, 2005. The CRS Project Team would sincerely like to thank the following beta sites for testing this version of the software:

- Aroostook Band of MicMacs
- Cherokee Indian Hospital
- Chinle Comprehensive Health Care Facility
- Clinton Indian Hospital
- Colville Indian Health Center
- Portland Area Office

Key changes for this version include the following:

- New Centers for Medicare and Medicaid Services (CMS) report for use by hospitals to report on ten quality measures for heart attack, heart failure, and pneumonia
- Six new indicators (also included in HEDIS report):
 - Topical Fluoride (GPRA indicator for 2005)
 - Beta-Blocker Treatment After a Heart Attack
 - Persistence of Beta-Blocker Treatment After a Heart Attack
 - Cholesterol Management After Acute CVD Event
 - Osteoporosis Management in Women
 - Asthma Quality of Care
- Revisions to several existing indicators, including fixes for Childhood Immunizations (addition of CVX code 110 for Hepatitis B) and Mammography Screening (including refusals for certain CPT codes)
- New Elder Care report for patients 55+
- New Graphical User Interface (GUI)
 - Windows-based
 - In addition to current roll-and-scroll, users are not required to use the GUI

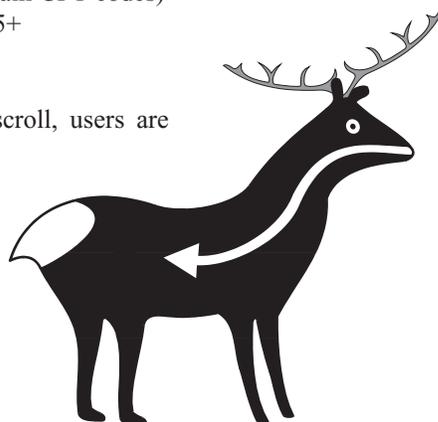
CRS 2006 Software

Version 6.0 is in the development phase and is planned for national release in late October 2005. Key enhancements planned for CRS Version 6.0 include the following:

- Colorectal Cancer Screening, Depression Screening, Childhood Weight Control, and Tobacco Cessation changed to GPRA indicators.
- Diabetes: Access to Dental Services, Public Health Nursing, Tobacco Use and Assessment, and Obesity Assessment changed to non-GPRA indicators.
- Revisions to several existing indicators, including Tobacco Cessation, Depression Screening (renamed and removed the Anxiety component); Childhood Immunizations, and Alcohol Screening (FAS Prevention).
- 3 new indicators
 - Antidepressant Medication Management (also included in HEDIS report)
 - Metabolic Syndrome
 - Rheumatology
- New Comprehensive GPRA Patient List that will list patients included in GPRA indicators and lists which indicators they did not meet.
- New site parameter for CHS-only sites
- New site-defined lab taxonomy report
- New childhood height and weight data file (GPRA developmental)

Beta-Test Sites Needed!

Beta-test sites are still needed for testing CRS Version 6.0. Version 6.0 is scheduled to be ready for beta testing on October 3, 2005 and will last four weeks. Please contact Stephanie Klepacki by e-mail at Stephanie.Klepacki@ihs.gov, or by telephone at (505) 821-4480.



Indian Health Training Network

The need for health care professionals to access up-to-date training on critical health issues has always been high, but challenges exist in meeting this need. This has been especially true for Indian health care professionals. The extensive barriers to travel, given the wide geographic distribution of IHS, tribal, and urban sites, and prohibitive travel costs make satellite training an ideal distance learning tool. It is this need that has led to the success of the Indian Health Training Network (IHTN).

The Indian Health Training Network – formerly the IHS Satellite Training Project – is a health information and training resource delivering televised programs via a satellite broadcast system to providers, professional staff, and administrators of IHS, tribal, and urban health care centers. Our goal is to provide health care professionals serving American Indians and Alaska Natives with increased access to critical and up-to-date health information. The broadcasts are made possible through a partnership between the Indian Health Service and the Centers for Medicare and Medicaid Services. The collaboration began in October 2002 with Hughes Global Satellite (now G2 Satellite Solutions) and DirecTV™ providing the satellite dishes and equipment to participating sites. Innovative Health Solutions, Inc. provides project management and marketing services for this initiative.

The reach of our network is nationwide, with 60 sites in 25 states (57 DirecTV™ sites and three alternative satellite sites). IHTN offers high quality continuing education opportunities for professional staff, access to trainings for remote communities, high quality and up-to-date clinical trainings, state-of-the-art satellite equipment installed free of charge at participating sites, and CEU or CME credit offered when available. Attendance at our broadcasts has continued to increase since the inception of this initiative. As a result of the growing popularity of IHTN, future plans include the growth of the existing network of sites, development of culturally appropriate programming, and the broadening of the target audience to include clinic administrators, information technology staff, and other clinic staff.

For more information, please visit us at www.indianhealthtraining.com.



2005 Advanced Practice Nurses Annual Business Meeting Report

Judith Whitecrane, CNM and Shannon Myers, FNP, both from the Phoenix Indian Medical Center, Phoenix, Arizona

The Annual Business Meeting for Advanced Practice Nurses (APNs) was held June 6 - 7, 2005, in conjunction with the PA/APN Continuing Education Conference in Scottsdale, Arizona. About 25 APNs from IHS, tribal, and urban programs attended the preconference business meetings, and another 50 APNs and physician assistants joined them for the educational sessions. These practitioners represent family practice, pediatrics, nurse-midwifery, mental health, adult, women's health, and acute care/emergency room specialties. They came from 32 Indian health sites, including Alaska, California, Maine, South Carolina and many points in between.

Sandra Haldane, RN, BSN, IHS Principal Nurse Consultant, attended the first full day of business meetings. She shared highlights of headquarters organizational structure and functions and told how APNs are playing an important role in health care across Indian Country. She heard accomplishments from practices in rural areas where APNs are solo practitioners, to urban practices where the majority of patient visits in large medical centers are provided by APNs.

The concerns brought forward to Ms. Haldane for her consideration were as follows:

- Need for approval and implementation of the APN National Scope of Practice

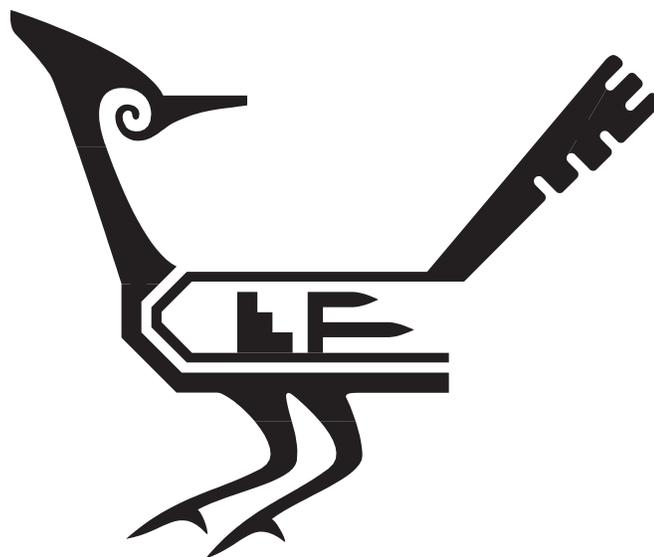
- Support for elimination of the GS-11 Civil Service rating ceiling for APNs. (Some Areas have done this, but there are several that still have not.)
- Support for entry level APN rating as GS-12
- Consideration of a Special Salary Scale for APNs to work toward parity with the private sector, in hopes of retaining and recruiting adequate numbers of APNs to meet health care needs.

Ms. Haldane assured the attendees of her full support for these four measures.

This year's work plan includes the following:

- Meeting the health care needs of American Indian/Alaska Natives (AI/AN) families by marketing the role of APNs
- Promoting leadership training and roles for APNs in Indian health
- Raising the APN GS rating to a minimum of GS-12 and consideration of a Special Pay rate for APNs
- Promoting behavioral health care services, especially in the area of substance abuse prevention and treatment by mental health care nurse practitioners.

The APN attendees most gratefully acknowledge the support and assistance of the Clinical Support Center and Nursing Headquarters for this annual event.



October is Domestic Violence Awareness Month

October 12 is Health Cares About Domestic Violence Day

October is national Domestic Violence Awareness Month (DVAM). This is an annual observance sponsored by the National Coalition Against Domestic Violence. Every October across the country, domestic violence survivors and advocates, health care providers, elected officials, law enforcement and public safety personnel, business leaders, faith-based groups and many others are organizing and participating in domestic violence memorial activities, public education campaigns, and community outreach events. If you would like more information about DVAM activities and how your facility can participate, visit www.ncadv.org.

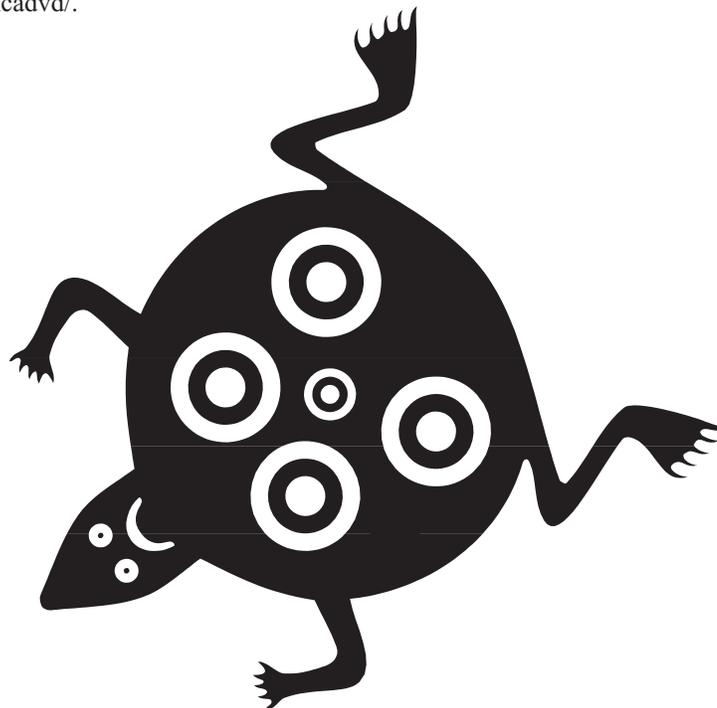
Join thousands of other health care providers for the seventh annual Health Cares About Domestic Violence Day (HCADV Day) on October 12, 2005!

Sponsored by the Family Violence Prevention Fund (FVPPF), HCADV Day is a nationally recognized awareness campaign that aims to educate members of the health care community about routine domestic violence (DV) assessment and the long term health implications of DV. If you would like more information about how your facility can participate in Health Cares About Domestic Violence Day as well as additional information about Domestic Violence Awareness Month, visit <http://endabuse.org/hcadvd/>.

Health care providers are in a unique position to identify and assist victims of domestic violence. If you would like more information about how to improve the response of your facility to domestic violence, visit www.endabuse.org/health.

Sample hospital and clinic domestic violence policies and procedures and guidelines for providers can be found on the IHS Maternal and Child Health Domestic Violence website at <http://www.ihs.gov/MedicalPrograms/MCH/W/DV00.cfm>.

If you are a victim of domestic violence, call the National Domestic Violence Hotline at 1-800-799-SAFE; TDD: 1-800-787-3224.





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THE IHS PRIMARY CARE PROVIDER



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

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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 e-mail.

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