



Indian Health Service

# OIT Newsletter

Office of Information Technology



**AUGUST 2009**

**Welcome to the  
IHS OIT Newsletter**

## **Inside This Issue**

### *Coming Soon*

- 2 2010 IHIM Conference
- 3 ITAC Online

### *Hot Topics*

- 4 Third Party  
Billing/Accounts  
Receivable
- 5 CPIC Select Stage of  
the EPLC
- 6 Web Applications
- 7 Enterprise  
Architecture (EA)
- 9 Patient Merge
- 11 Indian Health Service  
Electronic Dental  
Record
- 13 OIT Sponsored  
Training and  
Upcoming Events

### *Updates*

- 15 Information Security  
Tips
- 17 Contributors

The OIT Newsletter staff compliments each of you for your unlimited potential. This issue highlights only a few of the things you have accomplished in recent months.

"If I thought that I was doing it myself, the hole would close up and no power could come through. Then everything I could do would be foolish."

Black Elk, Oglala



# **COMING SOON: 2010**

## **Indian Health Information Management (IHIM) Conference**

### **Late Spring/ Early Summer 2010**

*Watch for more information  
at the following link*

<http://www.ihs.gov/CIO/IHIMC/>





## **Coming Soon:** **Information Technology Access Control Web Application**

*By: Michael McSherry, LTJG USPHS*

The Information Technology Access Control (ITAC) application, currently in testing, will replace the current paper method of requesting information system access. The new system will standardize the information access and removal process throughout Indian Health Service.

ITAC is a role-based, workflow web application, which will provide IHS with electronic tracking of information system access as required by many Federal information regulations. Under the new system supervisors will go to the IHS Web Site to request information systems access, changes to access or removal of access for their employees.

ITAC has been implemented at the National Programs and the Office of Information Technology (NP/OIT), Albuquerque. Implementation will be on an area by area basis for initial participating areas by December 31, 2009. Most facility level installations will be implemented based on area timelines over the coming Fiscal year.

If you would like information concerning IHS.gov or the Web Team, email LTJG Michael McSherry ([Michael.McSherry@ihs.gov](mailto:Michael.McSherry@ihs.gov)), IHS Web Manager.



He who would do  
great things should  
not attempt them all  
alone.

### Seneca



## **Hot Topics**

### **Third Party Billing/Accounts Receivable**

*By: Michael McSherry, LTJG USPHS*

#### **Export Web Application**

Indian Health Service (IHS) Business Office personnel located in the field regularly export Third Party Billing and Accounts Receivable (3PB/AR) data to the IHS HUB for United Financial Management System (UFMS) processing. In the current process it can be difficult for those personnel to confirm a successful export.

The new 3PB/AR Web application has been developed to provide exporters with the ability to validate the success of their data export and ensure that all records exported are received by the Interface Engine. The Web application will track received records to specific area batch files submitted to UFMS.

Additionally, the application will provide area financial personnel the ability to view summarization detail on each batch submitted to UFMS, and to track facility files that were combined to create each batch file.

Questions concerning this Web application can be sent to the OIT Help Desk at [support@ihs.gov](mailto:support@ihs.gov).

The 3PB/AR Web application is available for users on the IHS Intranet at the following link.

<http://home.ihs.gov/3pbar/index.cfm?module=home>

## Hot Topics

### Capital Planning and Investment Control Select Stage of the EPLC

By: Carl Gervais

#### **What is the IHS OIT Business Needs Statement (BNS) and what does this document mean to you?**

Capital Planning and Investment Control (CPIC) is the Department of Health and Human Services' (HHS) primary process for making investment decisions, assessing investment process effectiveness, and refining investment related policies and procedures. Capital Planning and Investment Control is mandated by the Clinger-Cohen Act, which requires agencies to use a disciplined process to acquire, use, maintain and dispose of information technology. Capital Planning and Investment Control accomplishes these requirements through three phases: Select Phase, Control Phase, and Evaluate Phase.

In last month's Office of Information Technology (OIT) Newsletter, we discussed the Capital Planning and Investment Control Select Stage of the Enterprise Performance Life Cycle (EPLC). In that article we outlined the requirements, outcomes, and benefits of the Information Technology project selection process.

The Select Stage begins with the completion of a Business Needs Statement (BNS) template. This template was created to provide the Office of Information Technology the information needed to make informed decisions on the approval of proposed Information Technology projects. Any Information Technology project over \$25,000 requires the submission of a completed Business Needs Statement for approval.

The Business Needs Statement template is composed of five elements:

- Information Technology Project Proposal.
- Business need impacted.
- Projected project outcomes.
- Purpose, goals and scope of project.
- Project risks.

The intent of Business Needs Statement is to provide enough information at the beginning of a project to better understand the funding and staffing impact. It is everyone's responsibility to help Indian Health Service (IHS) manage cost-effective projects.

Once the Business Needs Statement is completed by the business sponsor, it is submitted to the Indian Health Service Capital Planning and Investment Control Manager, Carl Gervais, for coordination of the approval process. Once the Business Needs Statement is approved, the next step in the Select Stage is the completion of the Indian Health Service Office of Information Technology Business Case Template.

Look for the next article in the Office of Information Technology Newsletter, *"So your Business Needs Statement has been approved, what's next?"*

The Indian Health Service Office of Information Technology Business Needs Statement template can be found on the Web at <http://www.ihs.gov/CIO/cpic/index.cfm?module=templates>.

If you have any questions, please contact Carl Gervais, CPIC Manager, at [Carl.Gervais@ihs.gov](mailto:Carl.Gervais@ihs.gov) or 505-248-4197.



Everyone who is  
successful must have  
dreamed of something.

## Maricopa



## Hot Topics Web Applications:

*By: Michael McSherry, LTJG USPHS*

### Physician's MORE

MORE is a Multiprogram On-line Recruitment Enterprise system. It has both an Internet and an Intranet component. The Internet component contains program/discipline-specific recruitment information to attract healthcare professionals to the Indian Health Service.

The site includes a dynamically populated, interactive recruiter schedule map; an IHS area map; and a series of forms, in which candidates can submit their information and resumes online. These forms create an electronic file for each candidate that can be managed and shared through the IHS Intranet by IHS recruiters across the country. A recruiter can upload documents and resumes, add notes, and even keep track of temporary duty assignments. The Intranet portion also contains a content management system that allows a nontechnical person to manage and maintain discipline-related content that appears on the Intranet site (links, documents, news releases, and general information).

Currently four implementations of the MORE system are running: Pharmacy, Nursing, Dental and most recently, Physicians. The Internet portions of these sites collectively receive hundreds of thousands of visits each year.

The project was completed on April 20th, 2009.

If you'd like information concerning IHS.gov, you can email LTJG Michael McSherry ([Michael.McSherry@ihs.gov](mailto:Michael.McSherry@ihs.gov)), IHS web manager.

## Hot Topics

# Enterprise Architecture is the Buzz at I.H.S. But What, Exactly, Is It?

By: Jennifer Driver

### What is Enterprise Architecture?

Enterprise Architecture is a comprehensive framework used to manage and align an organization's Information Technology (IT) assets, people, operations, and projects with its operational characteristics. It defines how information and technology will support the business operations and provide benefit for the business. The IHS Enterprise Architecture is managed by the Division of Information Technology and reports to the Chief Information Officer to ensure that it supports the IHS mission and goals.

As illustrated in the figure below, the IHS Enterprise Architecture is integrated with other IHS business functions to ensure that they work in tandem to achieve the IHS mission.



### Key components of Enterprise Architecture

Many pieces come together to create the Enterprise Architecture: (a) strategic goals and objectives, (b) program plan that identifies current and planned initiatives and their relative priorities, (c) governance framework to allocate decision rights and authority, (d) standards processes, (e) conceptual framework, and (f) compliance with federal mandates. In addition, there are a number of subsets of the Enterprise Architecture that are tied to particular missions or service areas, such as patient care, analysis and reporting, or capital planning. IHS is currently building the patient care segment, documenting the “as-is” architecture, and assisting program managers to plan for the future of their IT investments.



It takes a thousand  
voices to tell a single  
story.

### Tribe Unknown



## Hot Topics

### Enterprise Architecture is the Buzz at I.H.S. But What, Exactly, Is It? (continued)

By: Jennifer Driver

#### Benefits of Enterprise Architecture

The IHS Enterprise Architecture serves as an institutional "blueprint" to support analysis of business operations, which, in turn, provides the basis for planning and managing information technology resources. This enables the IHS Office of Information Technology to respond quickly to changes in the environment in which the organization operates and ensures that the components continue to operate smoothly through any changes. Enterprise architecture improves efficiency and collaboration in the IHS by providing a clear path for the future of IT that facilitates system interoperability across the IHS system. It identifies systems and information needed to support IHS business processes, defines the IHS' technology infrastructure, and documents the management process for aligning IT to business.

#### Why we use Enterprise Architecture

Enterprise Architecture (1) links information technology (IT) to the mission of IHS, (2) improves interoperability and integration, (3) enables agility, (4) reduces costs, (5) improves security, and (6) reduces technical risk.

In addition to these benefits mentioned above, Enterprise Architecture can assist a program in answering many questions and solving a variety of problems such as:

- How can I plan a project that will be consistent with current technologies?
- Is there existing in-house technology that can prevent building a new application or system?
- How can I decide which hardware or software is appropriate and will be supported by OIT?
- Are there hardware and software standards that must be adhered to by all IHS programs?

All IHS programs should contact the OIT Enterprise Architecture team, whenever a new IT system or modifications to existing systems are planned. The Enterprise Architecture team will work in concert with the program to ensure that the business need is met in the most efficient means possible, while maintaining compatibility with the existing IT architecture. In the future, the team will provide educational material and conduct awareness sessions for all staff to discuss the role of Enterprise Architecture and its interaction with IHS programs.

For more information regarding Enterprise Architecture, please visit our Web site at <http://home.ihs.gov/ITSC-CIO/EA/>.





## Hot Topics

### Patient Merge

By: Adam Vaughan

Patient Merge is an RPMS application that eliminates duplicate patient records within a single RPMS database, by combining registration and visit data for duplicated patients. This process results in all patient data being combined into a single patient entry, rather than split among separate, duplicate entries. Providers and other staff will then be able to see a patient's complete data without worrying that other data exists in perhaps another registration record for that patient.

This application has been under development within IHS for the past few years and should be released August 21, 2009. The current version of Patient Merge is based on a similar Veterans Administration package. Now, after tremendous work from developers and beta sites, IHS is preparing to release the application nationally.

In addition to the Patient Merge application, a series of recommended business processes have been developed for use with the software. Three main steps have been identified within this process: searching for duplicates, verifying duplicates, and merging duplicates. These steps require a combination of steps internal and external to the software.

In searching for potential duplicates, the software will compare demographic data for pairs of patients, assigning a score based upon how closely data for patients in the pair match. This score is then automatically compared to a threshold score. Pairs with scores above the threshold move to the next step.

The facility then researches the pair to ensure that the pair does, in fact, represent the same patient. This process may involve pulling charts, requesting archived medical records, or consulting with providers. The research is critical to ensure that the pair represents the same patient.

Once facility staff determines that patient pairs are duplicate and designates them to be merged, the software will then merge all RPMS data (including demographic, registration, and visit data) for those patients. Sites must then combine any paper files for the merged patients. In the end, the pair of patients will be reduced to a single patient record with all data combined.

Everything on the Earth has a purpose, every disease an herb to cure it, and every person a mission. This is the Indian theory of existence.

### Mourning Dove Salish

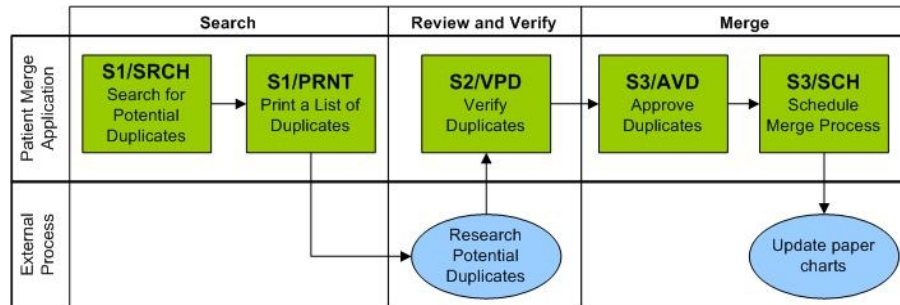


# Hot Topics

## Patient Merge (continued)

By: Adam Vaughan

The following figure summarizes the Patient Merge Process.



One critical caveat to this process is that there is no “unmerge” function. Because of this limitation and the potential catastrophic impacts for erroneously merging patients together, research of the pairs must be thorough and definitive to ensure absolute certainty before any merges are performed.

In an effort to address this limitation, sites must complete Patient Merge training prior to the release of Patient Merge to the site.

Training will be held at each Area Office and will take approximately five hours. Training sessions will describe both the software and the corresponding process.

The target audience for this training is Health Information Management, patient registration, and site managers. Each service unit should plan on attending this training.

Following the training, the application will be released to the site. At that point, sites can begin to identify and merge duplicate files to facilitate more accurate and complete patient records.

Training sessions will be posted and available for registration on the OIT National Training Web site at

<http://www.ihs.gov/Cio/RPMS/index.cfm?module=Training&option=Index&sortChoice=StartDate&newquery=1>

Training has presently been scheduled for 7 areas:

- Aberdeen, August 25, 2009.
- Albuquerque, August 25, 2009.
- California, August 26, 2009.

Phoenix and Tucson training have been completed.



**All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood.**

**(Article 1 of the Universal Declaration of Human Rights)**



## **Hot Topics**

### **Indian Health Service Electronic Dental Record**

*By: George Chiarchiaro*

#### **Background**

The IHS Electronic Dental Record (EDR) is a commercial, off-the-shelf dental clinical and practice management software application (Dentrix Enterprise) that is integrated with RPMS, or can be used as a stand-alone application for Tribal/urban programs not using RPMS. EDR will provide all the necessary clinical and dental practice management functionality needed by the IHS Direct/Tribal/Urban dental programs.

#### **How do I get EDR?**

Any facility wishing to obtain the EDR application must meet the basic requirements of having personal computers (PCs) with network connectivity in each dental operator and currently be using the IHS Electronic Health Record (EHR) or be "EHR Ready." Facilities that meet these requirements must then complete an EDR Facility Survey. An EDR Facility Survey can be completed and submitted online at

<http://www.doh.ihs.gov/EDR/index.cfm?fuseaction=home.display>

The EDR Facility Survey will be reviewed and the site's EDR status communicated to the site. If review of the completed EDR Facility Survey demonstrates the site meets the preliminary EDR readiness standards, the site will be placed in the queue for an EDR Site Assessment. If a site does not meet the preliminary EDR readiness standards, it is the site's responsibility to upgrade their systems prior to reapplying for EDR implementation.

#### **How much does EDR cost?**

Sites that participate in the national IHS/EDR Project will be responsible for only those costs associated with the initial hardware (servers and operator PCs), and software maintenance after the first year. Cost estimates are as follows:

- Server(s) (estimated range subject to site specific variables) = approx \$12,000 – \$35,000.
- Operator PCs = approx \$3,000 per operator.
- Software maintenance and support = approx \$600/year (beginning in Year 2).

## Hot Topics

### Indian Health Service Electronic Dental Record (continued)

By: George Chiarchiaro

#### When will EDR be available?

Interfaces between EDR and RPMS are currently being tested. Once the interfaces are certified, EDR will be installed in three Beta test sites. After completion of successful Beta testing, EDR will be approved for national release. Beta testing is scheduled to begin the end of August 2009, pending national certification in October 2009.

#### Can my site bypass national funding and use its own funds to purchase EDR and expedite the implementation?

IHS funding for EDR implementation is limited each year. Sites that do not want to wait for IHS funded implementation and are willing to support EDR implementation with their own funds may do so using the IHS contract. Self-funded costs vary widely depending on each site's size, network configuration, and IT infrastructure. A self-funded cost estimate can be obtained from Dr. George Chiarchiaro, EDR Project Manager at [george.chiarchiaro@ihs.gov](mailto:george.chiarchiaro@ihs.gov).

Self-funded sites must meet the same EDR readiness standards and will be placed on a separate implementation track from IHS nationally funded sites.

#### If my site has already purchased Dentrix or Dentrix Enterprise and wants to add the IHS-certified interfaces with RPMS, what is the process and how much does it cost?

It will be possible for sites that have already purchased Dentrix Enterprise without the IHS-certified interfaces to add the most recent IHS-certified HL7 interfaces. The process and cost will be determined after certification of the IHS interfaces in Fall 2009.

Sites that have already purchased Dentrix also have the opportunity to upgrade their system to Dentrix Enterprise, including the IHS-certified interfaces. The process and cost will be determined after certification of the IHS interfaces in Fall 2009.

#### Where can I get more information?

Visit the EDR website at <http://www.doh.ihs.gov/EDR/index.cfm?fuseaction=home.display>

Review the Frequently Asked Questions by clicking the Help tab on the left pane, or contact the EDR project manager:

Dr. George Chiarchiaro  
IHS/EDR Project Manager  
Phone: (405) 951-3818  
Cell: (405) 204-7664  
Email: [george.chiarchiaro@ihs.gov](mailto:george.chiarchiaro@ihs.gov)





## Hot Topics

# Office of Information Technology Sponsored Training and Upcoming Events

By: Kimberly Crespin-Richards

Office of Information Technology (OIT) sponsored Resource Patient Management System (RPMS) and Electronic Health Record (EHR) training completed this quarter:

Area	Sessions	Participants
Aberdeen	4	62
Albuquerque	6	96
Anchorage	4	38
Bemidji	6	86
Billings	1	10
Nashville	5	48
Oklahoma City	2	25
Phoenix	4	44
Portland	4	55
Sacramento	4	54
Window Rock	3	50
WebEx	20	197
<b>TOTAL</b>	<b>63</b>	<b>765</b>

To register for area based training work with your area training coordinator. To register for OIT sponsored RPMS and EHR training visit the following link:

<http://www.ihs.gov/Cio/RPMS/index.cfm?module=Training&option=Index&sortChoice=StartDate&newquery=1>

Scheduled Training Next Quarter:

<b>Aberdeen</b>
Aug 24-28 EHR On-Site Setup - McLaughlin, SD
Aug 25 Patient Merge v1.0
Sept 1-3 Advanced 3rd Party Billing/AR
Sept 21-25 EHR Reminders - Sioux Falls, SD
Aug 25 Patient Merge v1.0
<b>Anchorage</b>
Aug 24-28 EHR On-Site Setup - Barrow, AK
Aug 31-Sept 4 EHR On-Site Setup - King Cove, AK
<b>Bemidji</b>
Sept 15-17 EHR Onsite Setup - Keweenaw Bay, MI
Sept 21-25 EHR Reminders
<b>Nashville</b>
Sept 22-24 PCC Output Reporting



## Hot Topics

### Office of Information Technology Sponsored Training and Upcoming Events (continued)

By: Kimberly Crespin-Richards

Oklahoma City
Sept 21-25 EHR Reminders
Sept 14-18 EHR Onsite Setup - Hunter Health, KS
Phoenix
Sept 29-30 Patient Registration
Portland
Sept 21-25 EHR Reminders
Sept 21-23 EHR Onsite Setup - Squaxin Island, WA
WebEx
Sept 2 Bootcamp- iCare
Sept 3 iCare: HIV Management System in iCare
Sept 11 iCare: What's New
Sept 16 Bootcamp- iCare
Sept 17 iCare Nuts and Bolts I
Sept 18 iCare Nuts and Bolts II
Sept 28 iCare: What's New

The FY 2010 Needs Assessment is currently under evaluation and the training schedule will be posted in September 2009. For more information on upcoming OIT sponsored RPMS training please visit:

<http://www.ihs.gov/Cio/RPMS/index.cfm?module=Training&option=Index&sortChoice=StartDate&newquery=1>

## Updates

### Information Security Tips

Submitted by: Cathy Federico, CISSP IHS ISSO

#### Twelve Tips for Keeping a Laptop Secure

The following tips are industry-recommended "Best Practices" for laptops or notebooks. These tips do not override any IHS or HHS Security Policies and Procedures. Because IHS computers and laptops are updated and maintained by your local IT Help Desk, not all of these tips apply to IHS-owned equipment.

Laptops or notebooks are often the "other" computer – the one you do not use on a daily basis or only use when you travel. When your laptop is not powered up and online on a regular basis, its security software will become out-of-date or may expire and become ineffective. Your laptop may also be missing security updates and patches for the operating system and software applications, leaving it vulnerable to attack. Whether you use your laptop frequently or occasionally, keep it secure at all times by following these 12 tips.

1. Make sure your security software has not expired. If it has expired, renew or replace it immediately
2. Update the antivirus, antispymware, and software firewall before you use your laptop.
3. Check to make sure that patches and updates are current.
  - Windows: <http://update.microsoft.com/microsoftupdate/v6/default.aspx?ln=en-us>.
  - Mac: <http://support.apple.com/kb/HT1338>.

Not sure how to keep your software up-to-date? Contact a computer consultant or your Internet Service Provider (ISP), or ask the IT support staff at the office.

4. On the road, pick your hotspot connection carefully. Don't log on to any public hotspot that presents you with an invalid security certificate.
5. Turn off the wireless adapter (Wi-Fi) when you are not using it. This will help prevent hackers from breaking into your laptop wirelessly.
6. Avoid using computer bags. They make it obvious that you're carrying a laptop. Tote your laptop in something more common, like a padded briefcase or suitcase.
7. Never leave access numbers or passwords attached to your laptop or in your carrying case.
8. Carry your laptop with you. Always take your laptop on the plane rather than checking it with your luggage.
9. Keep your eye on your laptop. When you go through airport security, don't lose sight of it.
10. Avoid setting your laptop on the floor. Putting your laptop on the floor is an easy way to forget it, lose track of it, or step on it.
11. All government laptops are required to have encryption installed and operational at all times.
12. Use a screen guard if possible. These guards help prevent people from peeking over your shoulder as you work with sensitive information in a public place. For government systems contact your local IT support staff for local policies and procedures.

If you have questions or concerns about your laptop security; contact your local IHS Information System Security Officer (ISSO) or your Division of Information Security (DIS).

More information is available at the following Web sites:

<http://www.microsoft.com/atwork/stayconnected/laptopsecurity.mspx>

<http://www.onguardonline.gov/topics/laptop-security.aspx>

<http://www.microsoft.com/smallbusiness/resources/technology/broadband-mobility/using-wi-fi-safely-encryption-and-other-tips.aspx>

## Updates

### Information Security Tips (continued)

*Submitted by: Cathy Federico, CISSP IHS ISSO*

#### "You've received an e-card!"

The following tips are industry-recommended "Best Practices" for laptops or notebooks. These tips do not override any IHS or HHS Security Policies and Procedures. Because IHS computers and laptops are updated and maintained by your local IT Help Desk, not all of these tips apply to IHS-owned equipment.

Good news? Happy birthday? Get well soon? Maybe, but e-greeting cards, e-gift cards, and online holiday messages are increasingly being used by scammers and cyber criminals to spread viruses and other vicious malware. Many e-cards are rigged with links that take unsuspecting recipients to bogus Web sites that can infest systems or compromise user identities and personal information. If you believe you've been the victim of an e-card scam, report it to your computer consultant, computer help desk, or your ISP immediately.

If this occurs on a government system contact your local IT support staff.

Once the scam has been verified on non-government systems, file a report with the Federal Trade Commission on their Web site at <https://www.ftccomplaintassistant.gov/>

Some scam e-mails contain software that can harm your computer or track your activities on the Internet without your knowledge. Look for antivirus software that updates automatically, recognizes current and older viruses and can effectively reverse the damage if your computer does get infected.

#### E-card Dos and Don'ts.

- Do delete random emails that ask you to confirm or divulge personal information.
- Do use antivirus and antispyware software and update them regularly.
- Do use a two-way software firewall, which helps make your computer less visible on the Internet and blocks communications from unauthorized sources. It's especially important to run a firewall if you have a broadband connection. Operating systems (like Windows or Mac OSX) or browsers (like Internet Explorer or Firefox) also offer free software patches to close holes in the system that cybercriminals could exploit. Do apply the patches.
- Don't click on links in e-mails announcing an e-card or on e-card attachments. If it's a legitimate e-card, the sender may be disappointed that you didn't get it, but weigh that against the risk of your computer getting infected.
- Don't reply to e-mails or pop-up messages offering quick fixes for viruses. Legitimate computer security companies don't sell their products by spam e-mail or pop-ups.
- Don't cut and paste the link from the message into your Internet browser. Phishers can make links look like they go to one place, but actually send you to a different site.





# Contributors

Lynette Waters: Managing Editor



Theresa Cullen, M.D., M.S.	Rockville, MD
Michael McSherry, LTJG USPHS	Albuquerque, NM
Carl Gervais	Albuquerque, NM
Jennifer Driver	Albuquerque, NM
April Tinhorn	Phoenix, AZ
Kathy Federico, CISSP IHS ISSO	Albuquerque, NM
Adam Vaughan	Albuquerque, NM
Kimberlee Crespin-Richards	Albuquerque, NM
George Chiarriaro, DDS, MHA	Oklahoma City, OK

**Force, no matter  
how concealed,  
begets resistance.**

**Lakota**

## About the IHS OIT Newsletter

The IHS OIT Newsletter is published several times throughout the year by the IHS OIT. All articles and article suggestions are welcomed for consideration.

If you would like to submit an article for approval, or have any questions regarding this publication, please contact Lynette Waters at: [lynette.waters@ihs.gov](mailto:lynette.waters@ihs.gov)

All articles should be no longer than 1200 words in length and should be in an electronic format (preferably MS Word). If you have images that you would like added, please send them with the article. All articles are subject to change without notice.

