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The IHS Electronic Health Record Project

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The Indian Health Service (IHS) has long been a pioneer in using computer technology to capture clinical and public health data. The Resource and Patient Management System (RPMS) was developed in the 1970s, and many IHS facilities have access to decades of personal health information and epidemiological data for local populations. The RPMS' primary clinical component, the Patient Care Component (PCC), was developed by the early 1980s. The PCC contains an electronic abstract of patient information rather than a complete electronic health care record. It permits capture of the most essential clinical data concerning patient contacts with the health care system. The IHS is presently bringing RPMS to the next level of clinical technology, the IHS Electronic Health Record (IHS-EHR).

Electronic Health Records

Also known as computerized patient records (CPR) or electronic medical records (EMR), electronic health records allow for entry and storage of a wide variety of patient information in electronic format, and subsequent access to this information by health care providers, patients, and other authorized users. In its fullest form, an EHR replaces the paper record, eliminating the need for filing and storage, as well as the risk and inconvenience of misplaced or otherwise inaccessible charts. Lesser versions of an EHR may require some paper to be retained (such as outside consults or hospital reports), but still allow for most clinical transactions to take place on line, speeding transmission of information and reducing the risk of errors.

The concept of electronic records has been around for decades, but technology and the will to change business practice in the healthcare industry have been slow to develop. In 1991 the Institute of Medicine (IOM) issued a report urging a wholesale transition to electronic records within ten years.[1] This has not happened, but momentum is increasing, spurred on by a number of Federal government agencies.

In the 1990s the Veterans Health Administration (VHA) made the decision to move all of its facilities to an electronic record. The VHA now has a robust and capable electronic record known as the Computerized Patient Record System, or CPRS. CPRS is constantly being upgraded and improved by a large team of clinical and technological experts within the VHA. The Department of Defense (DoD) also has its own version of an electronic record, the Composite Health Care System (CHCS) II, which is in the process of being deployed at military medical treatment facilities around the world. At the same time, a variety of commercial electronic healthcare record products have been developed and are being heavily marketed.

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Government Mandate

The Bush Administration has come out strongly in favor of electronic medical records. Early in 2003 the Center for Medicare and Medicaid Services (CMS) reported that it would consider offering financial incentives for physician practices and hospitals that use electronic records. DHHS Secretary Tommy Thompson announced on July 1 that the Department had commissioned the Institute of Medicine to produce a set of recommendations on the key capabilities of an EHR system.[2] These recommendations[3] were published on July 31 and forwarded to HL7 Inc., a standards development organization, which is now in the process of evaluating and seeking public comment.[4] This is a rigorous process that is likely to take a number of months, but the ultimate outcome of HL7 balloting will be a national standard of general requirements for electronic health record systems.

Why an Electronic Record?

Electronic records offer numerous benefits, only a few of which can be considered here. The most compelling reason to utilize an EHR is for patient safety. Especially since the 2000 IOM report on patient safety,[5] the attention of the nation has become focused on medical errors and the risks they pose for patients. Abundant evidence demonstrates that medication errors, the primary cause of iatrogenic injury, can be dramatically reduced by the use of computerized provider order entry (CPOE).[6,7] Even a limited EHR with only CPOE capabilities has the potential to reduce medical risks to patients and litigation risks to providers.

Anyone who works in a facility with more than one clinic can appreciate the value of consistent access to the medical record. While a paper chart can only be in one place at a time, electronic records are accessible to all authorized users of a facility's network, no matter where they are. A patient can go from appointment to appointment without waiting for the chart to be transferred, and providers in satellite clinics can access the same information available at the home facility. Ultimately it will be possible for providers taking call from home to be able to call up patient records through secure connections to a personal computer, enhancing the safety and efficiency of after-hours care.

Timely data entry is another advantage of electronic records. Most of the data are entered directly by the user (nurse, provider, pharmacist, etc.) at the point of service. All documentation that has been electronically signed is immediately available to other users. For example, pharmacy orders go immediately to the pharmacist, who has access to all prior notes, problem lists, diagnosis lists, and so forth. At the same time, as soon as the clinical staff enters the diagnosis, procedure, supply, and evaluation and management (E&M) codes, this information is available to the business office for billing purposes. Professional coders will have an important role to play in education, support, and monitoring of providers who will have increasing responsibility for coding compliance.

Privacy and security of health information are increasingly important considerations. Paper records are subject to browsing, tampering, diversion, and loss. Electronic health record databases employ sophisticated security measures to limit information access to only authorized users. In addition, audit trails can be maintained to monitor who is looking at electronic records as well as to track all changes to the record. Users will continue to be responsible for their own security codes, because the use of those codes can be monitored to look for security breaches.

With respect to loss of information, daily or even multiple daily backups of the electronic database can ensure that the maximum loss of data in case of a system failure can be limited to a few hours. Contrast this with the loss of a single paper record, which can contain a patient's entire lifetime of health information.

The IHS-EHR Project

Anticipating the national push toward electronic records, in 2002 IHS leadership mandated that the Information Technology Support Center (ITSC) should develop an EHR for use in IHS, tribal, and urban program (I/T/U) facilities. A pilot project at Crow Indian Hospital was developed using components of the VHA's CPRS in a graphical user interface (GUI) or Windows® format. Over the past several months, ITSC programmers and contractors have been working hard to prepare an IHS-specific suite of applications that will comprise the complete Electronic Health Record product.

IHS and VHA clinical applications are very similar. In fact, many RPMS applications were originally developed by the VHA and adapted for use by the IHS. The IHS developed other RPMS applications, and the VHA has adapted some of these for use in their system. Because of the similarity of IHS and VHA clinical data platforms, and because the VHA has tremendous software development resources and has agreed to work closely with IHS on co-development of EHR capabilities, IHS is modeling its electronic record on the VHA CPRS application.

Most modern computer users are comfortable with Windows® applications, which interact with the user through a combination of mouse clicks and keyboard entry. These graphical user interfaces (GUI), pioneered by Apple Computer in the 1980s, have become ubiquitous on personal computers over the past twenty years. Most clinical users find GUIs to be familiar and generally more intuitive than the command-based "roll and scroll" interfaces typical of RPMS applications. Other high volume users, such as pharmacists, laboratory staff, and registration clerks, often prefer the "roll and scroll" interface because keyboard entry takes much less time than using a mouse.

The IHS-EHR will include familiar but upgraded RPMS applications, accessible either in their native "roll and scroll" format or through a GUI. The GUI "front end" for IHS-EHR is VueCentric®, a product owned by Clinical Informatics Associates (CIA), an IHS contractor. Through the

VueCentric® interface, users will be able to perform a variety of functions, including:

- Patient lookup
- Personal patient lists
- Abnormal result notification
- Clinical reminders
- Problem list management
- Order entry for laboratory, radiology, medications
- Laboratory results retrieval
- Radiology and other report retrieval
- Clinical encounter documentation
- Clinical decision support (local and web-based)
- Coding support
- Consult/referral generation and tracking

In fact, essentially any functionality offered within the "back-end" RPMS applications will be accessible through the GUI. These applications include:

- Text Integration Utility (TIU) v1.0 (a template-based notes authoring application)
- Laboratory v5.2
- Women's Health v2.0
- Radiology v5.0
- Pharmacy Inpatient v5.0
- Pharmacy Outpatient v7.0
- Order Entry/Results Reporting (OE/RR) v3.0
- Patient Information Management System (PIMS) v5.3

Even sites that do not plan to implement the full EHR in the short term will benefit from the project, because of the concentrated effort on the part of ITSC programmers to upgrade these RPMS packages to the most current versions. These packages will be available for all I/T/U facilities to use, with or without the EHR GUI product.

The VueCentric® presentation layer is also able to display commercial off-the-shelf (COTS) applications, if they have been specifically adapted to the product. This will permit individual facilities some flexibility in how they configure their electronic health records. However, the Information Technology Support Center does not support COTS applications, so sites wishing to use such applications within the EHR would need to arrange for interface programming and support from private vendors or contractors.

Infrastructure and Site Preparation

Transitioning to an electronic health record requires extensive changes in a health care organization's business processes, as well as in the computer hardware and software needed to support and run the EHR. Sites contemplating the IHS-EHR should begin to evaluate staff duties and workflow patterns, and consider how these may need to be redesigned. The impact of an EHR upon the smallest details of day-to-day practice should not be underestimated, and ITSC intends to make business process consultation a component of the IHS-EHR implementation program.

Because medical providers and many other users of the EHR will need access to the system at the point of service, most facilities will need to upgrade their network infrastructure and install new computer hardware. In addition, the latest versions of and patches to RPMS applications will need to be installed. System requirements and other technical information for sites anticipating EHR implementation will be posted on the IHS-EHR website and regularly updated.

Rolling out an electronic record system at any facility will require a substantial training effort at the time of implementation, as well as an ongoing program of training and support in anticipation of staff turnover and application upgrades. Most organizations planning for EHR should expect to add a full time Clinical Applications Coordinator position for support of and training for the product. In addition, facilities should consider whether additional Information Technology staff would be needed to support potentially increased demand on this department.

Additional Considerations

As described above, "up front" costs for network and hardware upgrades can be substantial. On the other hand, because the IHS-EHR is mostly in the public domain, software costs and licensing fees are modest compared to commercial EHR applications. Moreover, enhanced charge capture and billing capacity offered by the EHR can be expected to offset the infrastructure costs in a relatively short time.

No record system, paper or electronic, is perfect. Although data backup can limit the amount of data that can be permanently lost, occasional system failures are inevitable. Facilities must have contingencies in place for patient care and encounter documentation in such instances. In addition, especially through the transitional period, redundant record keeping (recording in both electronic and paper formats) may be necessary to prevent loss of information due to implementation glitches.

Provider buy-in and acceptance of any new system impacting clinical care are critical. Providers must be involved in all decisions relating to whether or not to use an EHR, as well as all the accompanying business process changes. The EHR system must be seen as relevant, helpful, safe, and capable of enhancing patient care. Support for clinical users of the EHR must be available in real time at all hours of operation, because unlike problems with e-mail or other computer applications, inability to make the electronic record work has an immediate impact upon patient care.

Providers and administration must be willing to anticipate and accept a decrease, possibly substantial, in provider productivity in the first weeks and months of EHR operation. Until familiarity and facility with the EHR in the exam room

have been achieved, providers will see fewer patients per day. However, efficiencies afforded by the EHR in other provider duties (i.e., reviewing results or responding to calls without a paper record), as well as in other parts of the system (instantaneous and legible prescriptions, billing data complete at time of visit), will affect productivity in a positive way.

Current Status

The National IHS leadership has identified the EHR project as one of the highest priorities for the Agency in 2004. The IHS is committed to making a capable electronic record application available to I/T/U facilities within one year. As of this writing, the IHS Electronic Health Record is scheduled for alpha testing at the Tuba City Indian Medical Center beginning in the winter of 2003-04. Two additional alpha test sites will be used to ensure that the EHR works in different environments without interference with other applications. Several beta test sites will be selected, at which the product's usability and reliability in the clinical setting will be further evaluated. These test sites will continue to be the proving ground for future upgrades and enhancements to the EHR.

Final certification of IHS-EHR for distribution to the rest of the I/T/U system is anticipated later in FY 2004. Once available, demand for the EHR is expected to be high. ITSC is developing a training and deployment program in preparation for this demand. Keith Longie, CIO, and his staff will be working with Area Directors to develop EHR site selection strategies and implementation plans. The IHS-EHR web pages on the Indian Health Service Internet site (*http://www.ihs.gov/cio/ehr/index.asp*) will be a source of continuing information about the project, and representatives of interested sites are welcome to contact the author or other project leaders.

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Additional Reading

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Selection of PCC+ Metrics or Measurements for Performance Improvement

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Introduction

Performance improvement (PI) and quality improvement (QI) efforts in healthcare "focus on the use of interventions and tools to change identified processes resulting in improved quality."[1] Although there appear to be many definitions for "quality" in health care, the Institute of Medicine's (IOM) definition has proved to be enduring:

> *Quality is the extent to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge*.[1]

Overview of Quality Improvement Organizations

In the United States, there are several leading organizations that support and promote the IOM definition of "quality" in health care. These organizations conduct or promote quality improvement activities in several public health concerns such as heart disease, cancer, diabetes, stroke, pneumonia, immunizations, women's health, alcohol and other addictive drugs, physical activity, nutrition, depression, trauma, oral health, violent and abusive behavior, and counseling.

Joint Commission on Accreditation of Healthcare Organizations (JCAHO). The Joint Commission evaluates and accredits nearly 17,000 health care organizational programs in the United States. Its primary mission is to "continuously improve the safety and quality of care provided to the public through the provision of health care accreditation and related services that support performance improvement in health care organizations."[2] JCAHO defines performance measurement in health care as what is done and how well it is done. According to the JCAHO, performance measurement benefits the health care organization by "providing statistically valid, data-driven mechanisms that generate a continuous stream of performance information."[2] This enables organizations to understand how well they are doing and to measure performance over time.

Accreditation Association for Ambulatory Health Care (AAAHC). AAAHC is a private, not-for-profit organization that assists ambulatory health care organizations in improving the quality of care they provide to their patients. AAAHC accomplishes this through "setting standards, measuring performance, providing consultation and education where needed, and ultimately by awarding accreditation to those organizations that are found to be in compliance with its standards."[3]

Agency for Healthcare Research and Quality (AHQR). AHRQ is the nation's lead Federal agency for research on health care quality, costs, outcomes, and patient safety, formerly known as Agency for Healthcare Policy and Research (AHCPR).[4] According to AHQR, health services research examines how people get access to health care, how much care costs, and what happens to patients as a result of this care. Major areas of health care research for AHRQ include quality improvement and patient safety, outcomes and effectiveness of care, clinical practice and technology assessment, health care organization and delivery systems, primary care including preventive services, and health care costs.

Centers for Medicare and Medicaid Services (CMS). CMS, formerly the Health Care Financing Administration (HCFA), is a Federal agency that runs Medicare, Medicaid, and the Children's Health Insurance Program (CHIP).[5] In addition to buying health care services for beneficiaries, CMS also conducts research on the effectiveness of various methods of health care management, treatment, and financing and assesses the quality of health care facilities and services. Their main objective is to analyze data from various sources and improve patterns of care for their recipients. CMS clinical quality indicators are firmly based in science and on public health importance and feasibility for measuring and improving quality.

National Committee for Quality Assurance (NCQA). NCQA is dedicated to "improving the quality of health care delivered to people everywhere" and to becoming "the most widely trusted source of information driving health care quality improvement."[6] NCQA is best known for its reporting on managed care plan quality through its accreditation and performance measurement programs. NCQA is also active in quality oversight and improvement initiatives at all levels of the health care system accomplished through performance measurement activities in satisfaction, quality of care, access, and service.

National Association for Healthcare Quality (NAHQ). NAHQ is "dedicated to improving the quality of health care and to supporting the development of professionals in health care quality." Their purposes are to promote delivery of qual-

ity healthcare; provide leadership; promote professional ethics; facilitate communication, cooperation, and sharing of knowledge; advocate interests of patients in receiving quality health care; and provide education and tools for promotion of quality health care.

Use of Informatics in Quality Improvement and Quality Assurance

Medical informatics is the "field of study concerned with a broad range of issues in the management and use of biomedical information, including medical computing and the study of the nature of medical information."[8] Similarly, clinical informatics is the "application of medical informatics methods in the patient care domain; a combination of computer science, information science, and clinical science designed to assist in the management and processing of data, information, and knowledge to support the practice and delivery of clinical care."[8] The application of informatics is a useful tool for the advancement of performance improvement (PI) and quality improvement (QI) efforts in health care.

Value of QA Process and Team Approach in Selecting Measures

Donabedian[9] defined health care quality in clear operational terms and provided detailed blueprints for both its measurement (known as quality assessment) and its improvement (known as quality assurance). He demonstrated that quality is (a) an attribute of a system that he called *structure*, (b) a set of organized activities, which he called *process*, and (c) an *outcome* that results from both. A performance measure or indicator is a "quantitative tool (for example, rate, ratio, index, percentage) that provides an indication of an organization's performance in relation to a specified process or outcome."[10]

In selecting performance measures or indicators for PCC+, the facility needs to address several items. This begins with the structure of the "PCC+ Team." The team should be made up of individuals from departments close to the PCC+ implementation process, as they are best qualified to accomplish the process review. This may mean that the team consists of more staff than managers. The team will then identify quality measures and indicators that will be used to meet the facility's goals and objectives.

- The indicator needs to be measurable, doable, and practical.
- A baseline measure needs to be established in order to measure change.
- Several "meaningful" measurements need to be selected by the team overseeing the PCC+ project. It would *not* behoove the facility to select *all* measurements, for the majority of their time would be dedicated to metric review and calculations instead of clinical care and billing.

Each objective is a statement of improved outcomes, which involves calculating measurements. The wording of each objective needs to include both the stated improved outcome with measurements, for example, "increase documentation compliance of foot exams by 25%," or "decrease data entry backlog by one week." To accomplish the objectives, the "PCC+ Implementation Team" needs to assess the workflow accompanying the PCC+ process as to:

- What can be done to improve the process to derive an improved outcome?
- Are there duplicative processes that can be combined?
- Do the providers need to be educated about documentation and coding to improve data capture?
- What codes or "reminders" should be imbedded in PCC+ to improve encounter data documentation?

Collectively, the team should develop solutions, prioritize changes, implement workflow changes, and remeasure the indicator, all to determine if the change improved or did not improve the outcome. If the latter, the team needs to reevaluate the change process to determine if staff complied or if another solution would work better.

QA Tools Based on PCC+ Data

The Resource and Patient Management System (RPMS) is an integrated software system for the management of both clinical and administrative data in Indian Health Service (IHS) and tribal facilities. Clinical RPMS applications and packages are useful tools for promoting and measuring clinical quality improvement because of many types of patient care data entry (inputs) and quality reports (outputs). The RPMS software applications that are useful for performance improvement activities include the Asthma Register System; Behavioral Health System; Case Management; Diabetes Management; GPRA+ Clinical Indicator Reporting System; IHS Patient Chart; Immunization Tracking; the PCC+ Encounter Form; PCC Management Reports; Q-Man; and Women's Health. We will briefly describe each of these tools.

Asthma Register System (ARS)

ARS is a register with associated reports and forms for managing patients with asthma. This package may be used in two ways: (a) as a register of patients who can be actively managed through case management and (b) to capture asthma-related patient data and provide appropriate health care reminders to providers. ARS reports identify patients who need to have medications reviewed, an asthma visit scheduled, or other asthma related activities.

Behavioral Health System (BHS)

BHS is a new package that combines the functionality of both the Mental Health/Social Services (MH/SS) and Chemical Dependency Management Information System (CDMIS) packages. New functionalities and data fields were added to

improve patient outcomes, program management, standards, and quality reports. This package allows for "point-of-service" data entry for improved data quality.

Case Management System

Case Management is a useful application that establishes and maintains patient registers for managing select groups of patients. The registers may then be stored in an RPMS template and utilized for a multitude of quality reports.

Diabetes Management System

Diabetes Management is a patient-centered application that provides the capability to monitor the overall effectiveness of individual patient care, case management services, and a diabetic program. This application provides patient-focused care review; provides a "Diabetes Patient Care Summary" (report); contains a simplified creation of required taxonomies; minimizes redundant data entry through its "point-of-service" data entry capability; and generates automated audits for assessing compliance with diabetes standards of care.

GPRA+ Clinical Indicator Reporting System

GPRA+ is designed for both local and Area-wide measurement of the Indian health system Government Performance and Results Act (GPRA) indicators. This application is a powerful performance measurement tool because it provides a straightforward way to measure clinical quality indicators based on RPMS data; eliminates manual chart review; may be used by all staff involved in performance improvement activities; and assures comparable data by using the same logic and queries.

IHS Patient Chart

IHS Patient Chart is a Windows-based GUI (Graphical User Interface) application that facilitates access to patient information in a variety of RPMS packages. It also permits "point-of-service" data entry for problems, measurements, patient education, and other data.

Immunization Tracking System

Immunization Tracking compiles and reports on historical and current immunization data; forecasts immunizations; updates vaccine lot numbers; and generates immunization quality reports.

PCC+ Encounter Form

PCC+ (PCC Plus) is a customizable encounter form that is a connection between the Resource Patient Management System (RPMS) database and Microsoft Word® which can yield a variety of real-time documents including: (a) customized encounter forms, (b) health summaries, (c) patient education materials, (d) claims forms, (e) "outguides," (f) management reports, and (g) order entry forms. The ultimate goal of PCC+ is to improve the quality of health care, data integrity, and billing integrity. This is accomplished through combining the best features of the Patient Care Component (PCC) encounter form, the superbill, and the health summary into one integrated document. Overall, PCC+ streamlines both the documentation and data entry process and places increased emphasis on data quality. The PCC+ objectives are:

- To improve the quality of patient care and population health through integrated health summary functions, diagrams, and clinical reminders and check blocks for providers.
- Enhance providers' ability to see the "whole patient' by incorporating previous results, active problem lists, and active medications into one integrated encounter form.
- Improve data entry quality and productivity by standardizing the format and location of data, improvement of the provider's legibility and descriptions, and use of embedded CPT and ICD-9 coding for commonly used visits, procedures, lab tests, and x-rays.

PCC Management Reports

PCC Management Reports provides numerous reports for both individual patient and program management. This application facilitates retrieval of quality information from the RPMS database through customized reports.

Q-Man

The primary purpose of Q-man is to generate a "query" in order to "mine" the RPMS database. Each query consists of four basic elements:

- subject = what you are searching for
- attribute = a distinguishing characteristic of the subject
- condition = a logical operator used to delimit a particular value
- value = quantity/state used with condition to indicate status of particular attribute

Women's Health

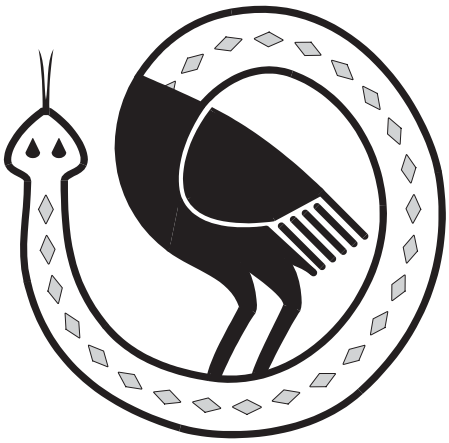
The Women's Health software includes a full range of breast and cervical cancer screening and tracking functions. Features include printing customizable letters for patients; the ability to track patients' breast and cervical needs as well as due dates; patient management reports; and epidemiological reports.

PCC+'s QA Value for Clinicians

Feedback to physicians about patient care and outcomes is not new.[11] Feedback as a strategy or tool to change physician practice is more recent.[12-14] We present two points for consideration in using RPMS/PCC+ data as feedback information. The first point is that the actual work of constructing or modifying a PCC+ form can include consensus building for protocols or

guidelines integral to the efforts. Several physicians can work on developing the essential components of care for a particular disease condition in order to incorporate items on the PCC+ encounter form and/or report. The work on consensus building among a group of physicians allows for discussions of standards, patient variations, and clinical research/reading, which are valuable feedback experiences.

The second point is that physician feedback needs to be the individual data in the context of a larger focus, such as the clinic or county/state. The feedback also needs to be on a regular schedule, such as a data review session at every staff meeting. If the feedback is a regularly scheduled event, then it becomes a process in which the physicians can participate in developing clinical foci for review, "friendly" data formats, and ongoing professional development.



PCC+'s Value for Efficiency and Efficacy in Business Processes and Patient Paths

PCC+ forms with the embedded codes (CPT, ICD9, HCPCS, health factors, mnemonics, and educational codes) improve the overall documentation and data capture obtained from the provider during the encounter visit. A secondary benefit, other than coding and documentation, is the enhanced legibility and accuracy in communicating more definitive documentation and codes to the coder. Previously the coder had to interpret various providers' handwriting and abbreviations. Now the coder can determine if the associated documentation and coding selected by the provider substantiate each other. If not, coders can immediately resolve any questions or discrepancies with the provider. That process, in itself, has greatly improved the "written" to "coding" translation.

Changes in the workflow process and utilization of the customized PCC+ form have tremendously helped facilities in the following ways:

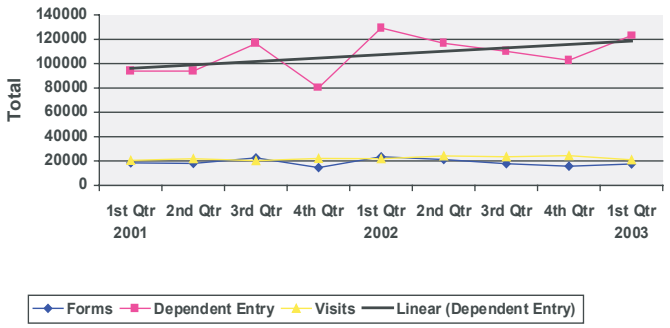
- Providers, with their closer working relationship with the coder, continue to improve their understanding of documentation and coding requirements required by insurers. This especially applies to the documentation and coding for evaluation and management.
- Procedures and services are more readily captured on the detailed PCC+ form, rather than being inadvertently missed or forgotten.
- A "team-oriented" approach to processing claims has developed between the provider, coder, and biller.
- The improved documentation will provide more detailed information and support for any internal or external audits.
- Improved legibility, standardized data documentation, and coding expedite the data entry process.
- The insurer also benefits from the improved coding and billing by reducing the number of returned claims seeking clarification or additional information. This in turn saves the facility many unnecessary hours of research and resubmission of claims.
- For the facility as a whole, the improved provider coding validated by a coder and billed accurately by a biller seeks to improve reimbursement from the insurer.

The combination of a detailed PCC+ form with embedded codes; improved provider documentation and selection of codes; improved clarity of codes for data entry; and accurate billing creates a detailed data document that improves the functionality, efficiency, and outcome for the entire business process.

Examples of Outcome Measures Using PCC+

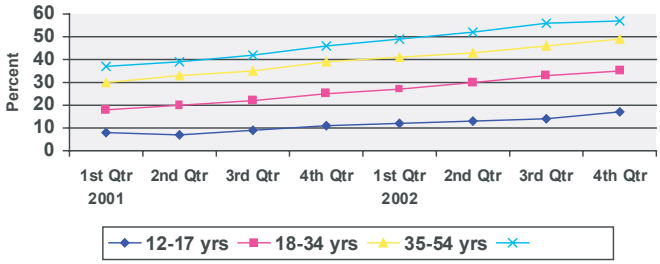
The Information Technology Support Center (ITSC) team has designed specific outcome measurements to determine if RPMS clinical informatics projects positively or negatively impact clinical care and business operations. RPMS quality reports may be utilized to determine if implementation of informatics software such as PCC+, Diabetes Management System, Patient Chart, Immunization Tracking, or Women's Health has improved documentation, ICD-9 and CPT coding, GPRA compliance, or other relevant measures. PCC data types include 1) date, type, and location of visit; 2) providers of service; 3) measurements, diagnoses, and procedures; 4) health problems and treatment plans; 5) personal and family history; 6) reproductive factors; 7) health factors; 8) patient education; and 9) a variety of other health related information. PCC+, Patient Chart, Diabetes Management System, Immunization Tracking, and other point-of service RPMS packages can improve both quantity and quality of data. PCC Management Reports demonstrates that although ambulatory visits and total number of PCC forms have remained fairly constant, the number of data entry elements has increased (see Figure 1).

Figure 1. Data Entry Elements as Measured by PCC Management Reports (Cherokee Indian Hospital)
Documentation of Tobacco Use



The use of tobacco represents the second largest cause of preventable deaths for American Indian and Alaska Native people. Smoking rates in many American Indian and Alaska Native communities are almost twice the national average.[15] Implementation of PCC+, Patient Chart, and the Diabetes Management System facilitate improved documentation of tobacco use or non-use. Both the GPRA+ and Diabetes Management System quality software may be utilized to measure impact (see Figure 2).

Figure 2. Documentation of Tobacco as Measusred by GPRA+ (Cherokee Indian Hospital)



Documentation of Diet and Exercise Education

Obesity is a major risk factor for Type 2 diabetes among all races and ethnic groups. Increasing rates of obesity have been measured in many American Indian and Alaska Native communities. Diet and exercise education are part of a long-term effort to identify effective interventions to prevent and reduce obesity in Native Americans and to prevent diabetes complications. Meal planning, nutrition education, and exercise are the primary strategies for Type 2 diabetes.

The IHS Diabetes Program supports the American Diabetes Association position that all persons with diabetes receive regular nutrition counseling. In addition, all patients with diabetes and their families should have diabetes self-care information. The National Standards for Diabetes Care and Patient Education provide guidelines for education development. PCC+, patient chart, Diabetes Management System, and IHS patient education protocols increase documentation of patient education. GPRA+ and Diabetes Management System quality software contain reports that measure patient education documentation (see Figures 3 and 4).

Figure 3. Diet and Exercise Education as Measured by GPRA+ (Cherokee Indian Hospital)

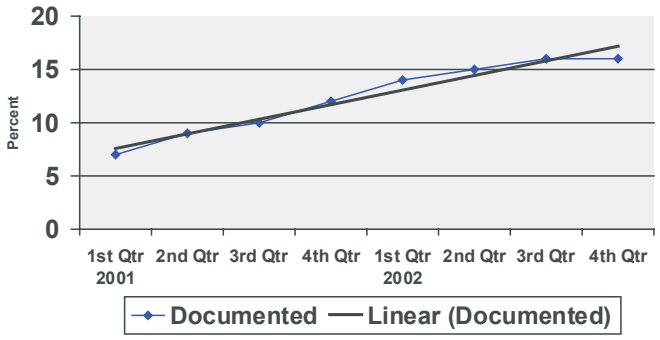
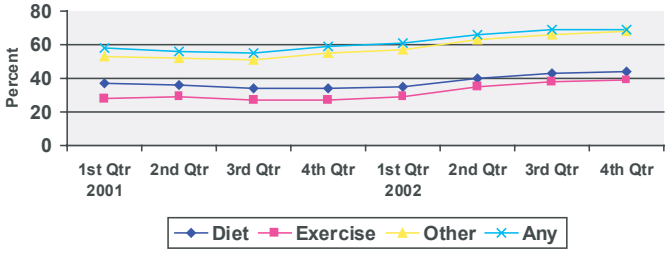


Figure 4. Documetation of Diabetes Related Education as Measured by Diabetes Management System (Cherokee Indian Hospital)



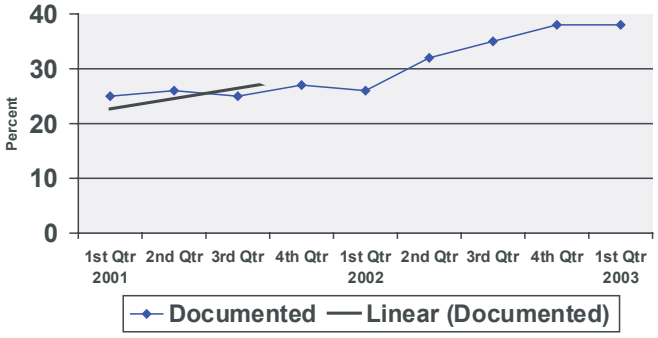
Diabetes Foot Exam

Amputation rates among Native Americans are 3 to 4 times higher than for the general population.[16] A proper foot exam is a low-cost and effective means to detect foot disease and assess the risk of future serious foot disease. The diabetes foot exam is a risk assessment to include:

- pulse check and sensory evaluation with monofilament
- identification of foot deformity
- documentation of history of foot ulcers.

PCC+ and the Diabetes Management System can increase documentation of foot exams. The Automated Diabetes Audit within the Diabetes Management System measures rates of foot exams (see Figure 5).

Figure 5. Diabetes Foot Exam as Measured by Diabetes Management System (Cherokee Indian Hospital)



Conclusion

The use of computers paired with the principles, practices, and techniques of medical and clinical informatics has become well established in almost every aspect of clinical practice. PCC+ and other RPMS informatics packages are successful "point-of-care" solutions for improving data integrity and clinical quality as defined by JCAHO, AAAHC, AHQR, CMS, NCQA, NAHQ, and GPRA. The analysis of structural, process, and outcome indicators (outputs) utilizing RPMS quality software has demonstrated improvements in: 1) documentation of patient education; 2) assessment of glucose control, hypertension, dyslipidemia, and foot exams in patients with diabetes, 3) documentation of tobacco use and cessation; 4) Body Mass Index (BMI) assessment; and 5) provider satisfaction. These RPMS packages are interim informatics solutions that provide a "bridge" to the electronic medical record (EMR).

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14. Kiefe et al. Improving quality improvement using achievable benchmarks for physician feedback: A randomized controlled trial. *JAMA*. 2001;285(22):2871-2879.
15. Indian Health Service. 2003. Retrieved 4/17/03 from *http://www.ihs.gov/CIO/ca/index.asp).* FY 2004 Performance Plan, FY 2003 Revised Final Performance Plan, and FY 2003 Performance Report.
16. American Diabetes Association. 2001. *Facts and Figures* [On-line]. Available at: *http://www.diabetes.org/ada/facts.asp#toll.*

Editor s Note: The following is a digest of the monthly Obstetrics and Gynecology Chief Clinical Consultants Newsletter (Volume 1, No. 9, October 25, 2003) that is 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@anmc.org.

OB/GYN Chief Clinical Consultant's Corner Digest

News flash . . . Date change . . .

The Obstetric, Neonatal, and Gynecologic Care Course (the ACOG/IHS Postgraduate Course) that is usually held in September each year has been moved to June 13-17, 2004. It will still be held at the Radisson Hotel Denver SE. See the 'Save the Dates' section below for details. Sign up soon, and/or spread this news, please.

Abstract of the Month

Prophylactic Antibiotics in Labor and Delivery

ACOG Practice Bulletin Number 47, October 2003

The following recommendations are based on good and consistent scientific evidence (Level A):

- All high-risk patients undergoing cesarean delivery should be given antibiotic prophylaxis.
- For prophylaxis with cesarean delivery, narrow-spectrum antibiotics, such as a first-generation cephalosporin, should be used.
- Antibiotic prophylaxis may be considered for patients with PROM, particularly in cases of extreme prematurity, to prolong the latency period between membrane rupture and delivery.

The following recommendations are based primarily on consensus and expert opinion (Level C):

- Evidence is insufficient to recommend perioperative antibiotic prophylaxis at the time of prophylactic or emergency cervical cerclage.
- Prophylaxis for bacterial endocarditis is optional in patients with the following cardiac conditions who are undergoing uncomplicated obstetric delivery: prosthetic cardiac valves, prior bacterial endocarditis, complex cyanotic congenital cardiac malformations, and surgically constructed systemic pulmonary shunts or conduits.
- Patients with the above cardiac conditions who are undergoing obstetric delivery complicated by intraamniotic infection should receive prophylaxis.
- Although the evidence is inconclusive, for low-risk patients undergoing cesarean delivery, use of prophylactic antibiotics is recommended.

Reference

Prophylactic antibiotics in labor and delivery. ACOG Practice Bulletin No. 47. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2003;102:875–82.
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=14551023&dopt=Abstract

OB/GYN CCC Editorial comment:

Many of these recommendations represent a significant departure from the past, because data have not continued to show clear efficacy for antibiotic treatment in selected circumstances. In addition, while it may be difficult for the individual practitioner to recognize or acknowledge the risks of inappropriate antibiotic use for his or her individual patient, the impact of increasing use of antibiotics can be felt clearly, even in the hospital setting. I suggest that Indian health facilities incorporate the recommendations in Table 1 from this ACOG document into their facility's clinical guidelines.

From your colleagues

From Tom Creelman and Paul Mobley

Intrathecal analgesia

Tom Creelman and Paul Mobley asked for more information about intrathecal analgesia after reading the Larry Leeman, et al. articles posted in last month's September OB/GYN CCC Corner *http://www.ihs.gov/MedicalPrograms/MCH/M/MCHdownloads/CCCCorner92303.doc*

Larry Leeman's reply

Thanks for comments on the lack of information on intrathecal analgesia (IT). We wanted to include information about intrathecals but were limited by space. As it was, AFP allowed us to publish a two-part article, editorial, and patient education handout, so I can't complain much about space limitations. Intrathecals were not mentioned in the article, as they were neither covered in

the symposium nor readily available. I am in full agreement that IT appears useful in rural hospitals without epidural capacity. Per the Fontaine article IT appears to have only a limited role if epidurals are available (e.g., a multip at 7 cm who really wants regional analgesia). Here are my comments that got edited out of the final editorial:

"Although four family physicians were among the 130 conference participants, several areas of particular interest to family practice maternity care received minimal attention. Rural maternity care was neglected, other than for the mention of a decreased availability and utilization of epidurals at smaller hospitals. A presentation on the use of intrathecal analgesia as an option for rural maternity care would have been beneficial." Intrathecals were included in a workshop I presented at the annual Family Centered Maternity Care conference. Below is information from the handout for the workshop:

Intrathecal analgesia

1. Subarachnoid injection of opioids
2. Easy to administer
3. No motor blockade
4. Rapid onset
5. Alternative to epidurals in rural areas without continual anesthesia presence in labor and delivery
6. Last up to 3 hours and may be repeated
7. May combine morphine and fentanyl for long acting and rapid relief
8. Pruritis is common and occurred in 95% of women in one study, although it was mild or brief in 2/3 (Fontaine 2002)
9. Not as effective as epidural for pain relief or maternal satisfaction. There was a high degree of satisfaction for women delivering within 3 hours of reciving intrathecal analgesia
10. Unlikely to be popular alternative to epidural analgesia in larger urban hospitals but has a role in rural and smaller

References

Fontaine P, Adam P, Svendsen KH. Should intrathecal narcotics be used as a sole labor analgesic? A prospective comparison of spinal opioids and epidural bupivacaine. *J Fam Pract.* 2002;51:630-635. *http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12160502&dopt=Abstract*

Stephens MB, Ford RE. Intrathecal Narcotics for Labor Analgesia. *American Family Physician.* 1997; 56:463-470. *http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=9262527&dopt=Abstract*

The Nature and Management of Labor Pain: Part I. Nonpharmacologic Pain Relief *http://aafp.org/afp/20030915/1109.html*

The Nature and Management of Labor Pain: Part II. Pharmacologic Pain Relief *http://www.aafp.org/afp/20030915/1115.html*

Management of Labor Pain: Promoting Patient Choice *http://www.aafp.org/afp/20030915/editorials.html*

Patient Information: Labor Pain: What to Expect and Ways to Relieve Pain *http://www.aafp.org/afp/20030915/1121ph.html*

From Larry Leeman

Effective repair of obstetric perineal lacerations requires a knowledge of perineal anatomy and surgical technique. Sequelae of these lacerations include chronic perineal pain, dysparunia, urinary incontinence, and fecal incontinence. CME available *http://www.aafp.org/afp/20031015/1585.html*

From Elaine Locke (ACOG Committee on American Indian Affairs)

Tribal benefits counseling program: expanding health care opportunities for tribal members.

American Indian tribal clinics hired benefits counselors to increase the number of patients with public and private insurance coverage, expand the range of health care options available to tribal members, and increase third-party revenues for tribal clinics. Benefits counselors received intensive training, technical assistance, and evaluation over a 2-year period. Six tribal clinics participated in the full training program, including follow-up, process evaluation, and outcomes reporting. Participating tribal sites experienced a 78% increase in Medicaid enrollment among pregnant women and children, compared with a 26% enrollment increase statewide during the same period. Trained benefits counselors on-site at tribal clinics can substantially increase third-party insurance coverage among patients.

Reference

Friedsam D, Haug G, Rust M, Lake A.Tribal benefits counseling program: expanding health care opportunities for

tribal members. *Am J Public Health*. 2003 Oct;93(10):1634-6. *http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=14534213&dopt=Abstract*

From Chuck North

Routine urine screening for preeclampsia?

Our nurses tend to get a nonclean catch each visit regardless of risk, which is time consuming, inconvenient, and costly. I found only one good article in the literature, from the *Medical Journal of Australia*, 2002, vol 177, pp 477-480, entitled The Clinical Utility of Routine Urinalysis in Pregnancy: A Prospective Study, by Murray N, Homer CS, Davis GK, Curtis J, Mangos G, and Brown MA. *http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12405888&dopt=Abstract*

The authors conclude that all low risk women should have just one initial automated dipstick clean catch midstream urine. Abnormal results or certain high risk conditions should be monitored accordingly.

OB/GYN CCC Editorial comment:

Yes, routine urine dipstick screening for preeclampsia is highly non-specific and insensitive. The practice of obtaining a urine sample at each prenatal visit seems to have taken on a life of its own through 'traditional practice' and is not based on the available evidence. The practice came from an era when there were otherwise poor methods to screen for preeclampsia and overt diabetes mellitus. Routine urine dipstick testing is costly and slows down your prenatal visit, with very little value added. The benchmark for routine preeclampsia screening is a casual sitting blood pressure determination (ACOG, AHRQ, USPSTF; see below). I suggest one take the funding and time wasted on the practice on routine prenatal urine dipstick testing, and hire a new nurse aide to streamline the flow of your clinic.

Method of preeclampsia screening

To screen for preeclampsia, measure an upright sitting blood pressure after a 10-minute rest. The diastolic blood pressure is that pressure at which the sound disappears (Korotkoff phase V). To reduce inaccurate readings, an appropriate size cuff should be used (length 1.5 times upper arm circumference, or a cuff with a bladder that encircles 80% or more of the arm). The blood pressure level should be taken with the patient in an upright position, after a 10-minute or longer rest period. For patients in the hospital, the blood pressure can be taken with either the patient sitting up or in the left lateral recumbent position with the patient's arm at the level of the heart. The patient should not use tobacco or caffeine for 30 minutes preceding the measurement. Although validated electronic devices can be used, a mercury sphygmomanometer is preferred because it is the most accurate device.

On the other hand

If a patient presents with a BP > 140/90, CNS or GI symptoms of preeclampsia, or signs/symptoms of a urinary tract infection, then urine samples should be obtained for dipstick urine protein, 24 hour urine protein, total protein/creatinine ratio, or urine culture, as clinically appropriate.

It is reasonable to obtain a preconception dipstick urine for protein and glucose, followed by a urine culture at the first prenatal visit only. That first prenatal urine culture is indicated for testing of asymptomatic bacteruria, not preeclampsia screening. "Caring for our Future: The Content of Prenatal Care, A Report of the Public Health Service Expert Panel on the Content of Prenatal Care, US Public Health Service, 1989"

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4. Screening for Preeclampsia Guide to Clinical Preventive Services Second Edition (1996) US Preventive Service Task Force. *http://www.ahrq.gov/clinic/2ndcps/preeclam.pdf*

Hot Topics:

Obstetrics

Fundamentals of Testing and Prevention Counseling with the OraQuick Rapid HIV Test

Rapid HIV tests can play an important role in HIV prevention activities. This page includes descriptions of the rapid HIV tests approved by the Food and Drug Administration, how the tests can be implemented in different settings, and research on the effectiveness and possible uses of the tests. *http://www.cdc.gov/hiv/rapid_testing/*

Gynecology

Continuous combination oral contraceptive pills to eliminate withdrawal bleeding: a randomized trial (Level I)

Objective: To compare bleeding profiles of a traditional 28-day oral contraceptive pill cycle with continuous administration.

Methods: After a 28-day run-in cycle, women were ran-

domized to either 28-day cycles (21 active pills and a pill-free week) or continuous use of the same 20 microg ethinyl estradiol/100 microg levonorgestrel formulation for 12 study cycles (336 days). The number of bleeding and spotting days were measured by daily diary. A subset underwent cycle 1 (n = 16), and nine (n = 14) pelvic ultrasound and endometrial histology sampling. Blood pressure, weight, hemoglobin, and adverse events were measured at revisit. The sample size with 80% power to detect a 67% reduction in bleeding days required 27 subjects in each arm.

Results: Of the 79 subjects randomized, 28 (70%) of the 28-day cycle and 32 (82%) of the continuous-use subjects completed the entire study (P =.6). With continuous use, 49%, 68%, and 88% of women reported no bleeding during cycles 2, 6, and 12, respectively. Amenorrhea or infrequent bleeding was present in 68% of continuous users during cycles 1-3 and increased to 88% during cycles 10-12. Spotting during cycle days 1-21 increased initially with continuous use but reduced over time, and by 9 months was less than the spotting reported by cyclic users. Adverse events, blood pressure, weight, and hemoglobin findings were similar between groups.

Conclusion: Extension of the 28-day oral contraceptive cycle to continuous use with a low-estrogen dose combination oral birth control pill resulted in significantly fewer bleeding days.

Reference

Miller L, Hughes JP. Continuous combination oral contraceptive pills to eliminate withdrawal bleeding: a randomized trial. *Obstet Gynecol*. 2003 Apr;101(4):653-61.
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12681866&dopt=Abstract

OB/GYN CCC Editorial comment:

Use of continuous oral contraceptive pills (OCPs) results in fewer days of bleeding and premenstrual discomfort, and increases quality of life. The monthly menses is somewhat of modern contrivance that many AI/AN women did not have traditionally, due to the repeated cycles of pregnancy and lactation. At this point we don't have an 84-pill pack available to us, but that can be created with a 4 packs of OCPs, during which the patient skips the placebo pills till the 4th pack, dispensed with a little patient education. It is well worth the effort.

Premenstrual dysphoric disorder (PMDD) is considered a severe form of premenstrual syndrome. Symptoms of PMDD occur during the last week of the luteal phase of the menstrual cycle and usually abate at the onset of menses. About 3 - 8% of all menstruating women experience PMDD, which can lead to significant functional impairment.

Several randomized, controlled trials have assessed the efficacy of selective serotonin reuptake inhibitors (SSRIs) in the treatment of PMDD. The SSRIs were found to significantly improve symptoms, particularly psychological or behavioral symptoms, during the luteal phase in women with PMDD. Also, SSRIs were found to improve the quality of life in women with PMDD. Headache, fatigue, insomnia, and anxiety were often reported as adverse effects. A decrease in libido or sexual dysfunction also was reported. In recent studies, intermittent SSRI therapy was found to be effective treatment for PMDD, and allows a woman to take the drug for only 14 days each month. Intermittent SSRI therapy should be recommended before continuous daily dosing of SSRIs in the treatment of PMDD.

Reference

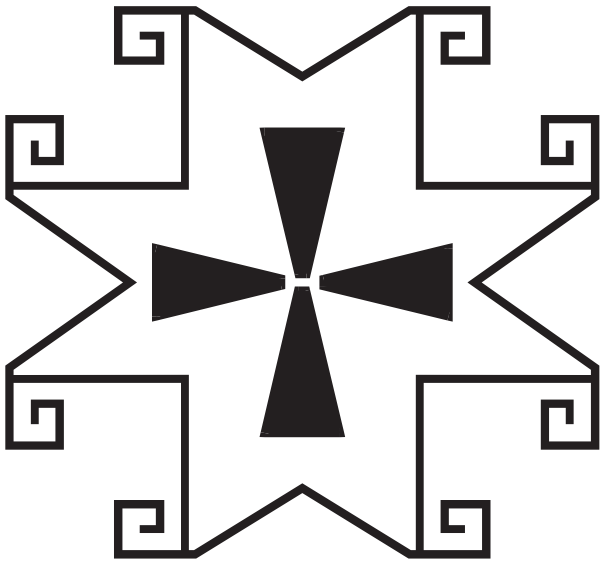
Luisi AF, Pawasauskas JE.Treatment of premenstrual dysphoric disorder with selective serotonin reuptake inhibitors. *Pharmacotherapy*. 2003 Sep;23(9):1131-40.
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=14524645&dopt=Abstract

Child Health

The Prevention and Treatment of Type 2 Diabetes Mellitus in Children, **With Special Emphasis on American Indian and Alaska Native Children** statement has been released
http://pediatrics.aappublications.org/cgi/reprint/112/4/e328

Infant Mortality Statistics from the 2001 Period Linked Birth/Infant Death Data Set

A new report from the CDC shows that the 2001 infant mortality rate in the United States reached a record low of 6.8 per 1,000 live births. Overall, about 27,500 infants died in the first year of life in 2001, compared with 27,960 in 2000. The three leading causes of infant death were congenital malformations, low birthweight, and sudden infant death syndrome,



which together accounted for 44 percent of all infant deaths. Fact Sheet -
http://www.cdc.gov/nchs/releases/03facts/lowinfant.htm
PDF (1.3 MB) -
http://www.cdc.gov/nchs/data/nvsr/nvsr52/nvsr52_02.pdf

Chronic Illness and disease

Prevalence of Diabetes and Impaired Fasting Glucose in Adults-United States, 1999-2000

This report presents data on the prevalence of diagnosed and undiagnosed diabetes and impaired fasting glucose from the National Health and Nutrition Examination surveys (NHANES) 1999-2000 and NHANES III (1988-1994). The findings indicate that diabetes and impaired fasting glucose continue to affect a major proportion of the U.S. population. An estimated 29 million (14.4%) persons aged ≥ 20 years had either diagnosed diabetes, undiagnosed diabetes, or impaired fasting glucose; 29% of diabetes cases were undiagnosed. Prevalence increased slightly with age and was similar in men and women. Persons can reduce their risk for diabetes through weight management and physical activity.
Text version -
http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5235a1.htm
PDF version - *http://www.cdc.gov/mmwr/PDF/wk/mm5235.pdf*

Overweight or obese individuals in the US do not believe that they are at serious risk of developing type 2 diabetes mellitus, according to a survey conducted recently by the American Diabetes Association (ADA). The survey comprised telephone interviews with 600 randomly selected adults as part of "Weight Loss Matters," the ADA's first educational initiative to focus on the relationship between body weight and diabetes. According to body mass index calculations, 52% of the respondents were overweight or obese. However, despite the fact that over half of these individuals reported knowing that being overweight or obese was a leading risk factor for type 2 diabetes, 59% maintained that they were not at personal risk for the disease. *http://www.diabetes.org/*

Features

American College of Obstetricians and Gynecologists (ACOG)

Benefits and Risks of Sterilization
ACOG Practice Bulletin Number 46, September 2003

Summary of Recommendations

The following recommendations are based on good and consistent scientific evidence (Level A):

- Tubal sterilization may be recommended as a safe and effective method for women who desire permanent contraception. Women should be counseled that tubal ligation is not intended to be reversible; therefore, those who do not want permanent contraception should be counseled to consider other methods of contraception.
- Patients should be advised that neither tubal sterilization nor vasectomy provides any protection against sexually transmitted diseases, including HIV infection.
- Patients should be advised that the morbidity and mortality of tubal ligation, although low, is higher than that of vasectomy, and the efficacy rates of the 2 procedures are similar.
- Patients should be counseled that tubal sterilization is more effective than short-term, user-dependent reversible methods.
- Patients should be counseled that failure rates of tubal sterilization are comparable with those of IUDs.

The following recommendations are based primarily on consensus and expert opinion (Level C):

- If a patient has a positive pregnancy test result after a tubal ligation, ectopic pregnancy should be ruled out.
- Indications for hysterectomy in women with previous tubal sterilization should be the same as for women who have not had tubal sterilization.

Reference

Benefits and risks of sterilization. ACOG Practice Bulletin No. 46. American College of Obstetricians and Gynecologists. *Obstet Gynecol*. 2003;102:647–58.
http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=12962966&dopt=Abstract

Full text for ACOG members, online
http://www.acog.com/publications/educational_bulletins/pb046.cfm

OB/GYN CCC Editorial comment:

Sterilization remains one of the most popular forms of contraception, with 28% of women choosing it nationally. Similar rates are seen in the Indian health system. Women sterilized before age 25 years were 18 times more likely to request reversal over the course of follow-up than women older than 30 years at the time of sterilization. Because young age at the time of sterilization, regardless of parity or marital status, is associated with significant levels of regret, individualized counseling of younger women is critical.

- Permanent nature of the procedure
- Alternative methods available, including male sterilization
- Reasons for choosing sterilization
- Screening for risk indicators for regret
- Details of the procedure, including risks and benefits of anesthesia
- The possibility of failure, including ectopic pregnancy

- The need to use condoms for protection against sexually transmitted diseases, including human immunodeficiency virus infection
- Completion of informed consent process
- Local regulations regarding interval from time of consent to procedure

Many questions arise about the details of the federal forms necessary and the nature of the 30-day waiting period. These are my most frequently asked questions, in fact. Several sterilization case scenarios examples are explored here: *http://www.ihs.gov/MedicalPrograms/MCH/M/MCHfaq.asp#B*

Breastfeeding

Educational programs were the most effective single intervention. One woman would breastfeed for up to 3 months for every 3 to 5 women attending breastfeeding educational programs. Future research and policy should focus on translating these findings into more widespread practice in diverse primary care settings.

Reference

Guise JM, Palda V, Westhoff C, Chan B, Helfand M, Lieu T. The Effectiveness of Primary Care-Based Interventions to Promote Breastfeeding: Systematic Evidence Review and Meta-Analysis for the US Preventive Services Task Force. *Annals of Family Medicine*. 2003;1:70-78.
http://www.annfammed.org/cgi/content/abstract/1/2/70

Hormone Replacement Update

ACOG disagrees with WHI on osteoporosis prophylaxis

"The WHI reports, however, calculate a global index to quantify overall benefit versus risk of estrogen-progestin therapy. Because Cauley et al calculated the global index HR to range from 1.23 to 1.03, depending on a woman's risk of fracture, they concluded that there was no evidence of a net benefit and recommended that treatment with estrogen plus progestin not be used for prevention or treatment of osteoporosis in women without vasomotor symptoms. We cannot agree with this global index approach because we believe it to be biased."

"The decision about use of hormone therapy requires evaluation of the risks and benefits for each individual woman. For women currently using hormone therapy, it is important to assess their reasons for use and to evaluate potential risks, benefits and alternatives. For patients with osteoporosis, other preventive therapies such as bisphosphonates and selective estrogen receptor modulators are available. For women at risk of osteoporosis who also have vasomotor menopausal symptoms, hormone therapy can be of benefit. Periodic reassessment of the need for hormone therapy is recommended at least at every annual visit or more frequently if indicated."

Reference

https://www.acog.com/from_home/publications/press_releases/nr10-07-03.cfm

MCH Alert

Toolkit Helps Increase Knowledge And Awareness Of Emergency Contraception

Developed by the Academy for Educational Development, this provides basic information about emergency contraceptive pills, makes the case that adolescents should know about EC, prepares adults to increase access and awareness among adolescents (as well as among their own peers), identifies resources for keeping current on the issues, and suggests evaluation strategies. It is available at
http://scs.aed.org/ECtoolkit3283.pdf.

Patient Information

Alternatives to Hysterectomy, ACOG

Women wanting more information on these subjects may request our patient education pamphlets "Uterine Fibroids" (AP074) or "Understanding Hysterectomy" (AP008) by emailing *resources@acog.org* or calling 202-863-2518.

Public Health Campaign Launched To Promote Appropriate Use Of Antibiotics

Get Smart: Know When Antibiotics Work is a national public health campaign designed to reduce antimicrobial resistance through the promotion of appropriate antibiotic use in the community. The campaign was launched by the Centers for Disease Control and Prevention, the Food and Drug Administration, and major national health organizations. *http://www.cdc.gov/drugresistance/community/files/Complete_ABR_VPK.pdf.* Additional information about the campaign, including educational tools, technical information, and campaign partners, is available at
http://www.cdc.gov/drugresistance/community/

What's new on the ITU MCH web pages?

Domestic Violence Lethality Assessment
http://www.ihs.gov/MedicalPrograms/MCH/W/Dv01.cfm#LethalityAssessment

Domestic Violence Safety Assessment Tool
http://www.ihs.gov/MedicalPrograms/MCH/W/Dv01.cfm#SafetyAssessmentTool

MCH Coordinators Teleconferences
This page has the materials and minutes used in these helpful networking opportunities
http://www.ihs.gov/NonMedicalPrograms/nc4/TelConf/TelConf.cfm
There are several upcoming **Conferences**
http://www.ihs.gov/MedicalPrograms/MCH/M/CN01.cfm#top
and **Online CME/CEU resources**, etc….
http://www.ihs.gov/MedicalPrograms/MCH/M/CN13.cfm
and the latest **Perinatology Corners** (free online CME from IHS) are at
http://www.ihs.gov/MedicalPrograms/MCH/M/MCHpericrnr.asp
…or just take a look at the **What's New** page
http://www.ihs.gov/MedicalPrograms/MCH/W/WN00.asp#top

Save the dates

Ninth Annual Maternal and Child Health Epidemiology Conference
December 10-12, 2003, Tempe, Arizona
Accepting abstracts *http://www.cdc.gov/nccdphp/drh/index.htm*

19th Annual Midwinter Conference for Providers Caring for Native Women and Children
Jan 30 – Feb 1, 2004. The 2004 brochure is pending.
See Conference Archives in February 2003 for information on last year's conference at
http://www.ihs.gov/MedicalPrograms/MCH/M/ConfArch.asp

3rd National Sexual Violence Prevention Conference, CDC
May 25 - 28, 2004; Los Angeles, California
http://www.cdc.gov/ncipc/2004nsvpc.htm

Obstetric, Neonatal, and Gynecologic Care: ACOG/IHS Postgraduate Course

- June 13-17, 2004 **Please, note this date change!**
- Denver, CO
- Contact Barbara Fine at (301) 443-1840
- 2003 brochure below. 2004 brochure will be available soon

http://www.ihs.gov/MedicalPrograms/MCH/M/ConfDnlds/ACOGpostgradBroch-2002.doc

2004 Biennial OB/GYN meeting
Please, note this date change!
August 4-6, 2004
Albuquerque, New Mexico
Location and brochure to follow
Contact Neil Murphy for questions *nmurphy@anmc.org*

Other items that are available in the full text October 2003 Volume 1, No. 9 at
http://www.ihs.gov/MedicalPrograms/MCH/M/OBGYN01.cfm

Contents:

Chronic Illness and Disease: October is Breast Cancer Awareness Month, Prevalence of Diabetes and Impaired Fasting Glucose in Adults-United States, Overweight or obese individuals in the US do not believe that they are at serious risk of developing type 2 diabetes mellitus

Features:

AFP: Common skin conditions in women

ACOG: Benefits and Risks of Sterilization, ACOG disagrees with WHI on osteoporosis prophylaxis

AHRQ: Lengthening postpartum hospital stays, Later admission in labor and collaborative care increase spontaneous vaginal delivery

ACOG: Benefits and Risks of Sterilization

Breastfeeding: Educational programs were the most effective single intervention

Hormone Replacement Update: ACOG disagrees with WHI on osteoporosis prophylaxis, Red clover and soy both contain phytoestrogens

Information Technology: Comparison of telecolposcopy systems,

International Health: Outcomes, safety, and resource utilization in a collaborative care birth center

MCH Alert: Toolkit helps increase knowledge and awareness of emergency contraception, Effectiveness of early home visitation programs in preventing violence, Impact of health centers on reducing health disparities

Office of Women's Health, CDC: Preventing Male Perpetration of Sexual Violence

Patient Education: Alternatives to Hysterectomy, Public health campaign launched to promote appropriate use of antibiotics

What's new on the ITU MCH web pages:

Save the Dates: Upcoming events of interest

Did you miss something in the last OB/GYN Chief Clinical Consultant Corner?

The prior CCC Corners are archived at:
http://www.ihs.gov/MedicalPrograms/MCH/M/OBGYN01.cfm#top

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THE IHS PRIMARY CARE PROVIDER

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

THE IHS PROVIDER is published monthly by the Indian Health Service Clinical Support Center (CSC). Telephone: (602) 364-7777; fax: (602) 364-7788; e-mail: *the.provider@phx.ihs.gov.* Previous issues of THE PROVIDER (beginning with the December 1994 issue) can be found on the CSC Internet home page *(www.csc.ihs.gov).*

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

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

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