AHIMA's Long-Term Care Health Information Practice and Documentation Guidelines

Practice Guidelines for LTC Health Information and Record Systems

---

Coding and Reimbursement

HIM Standard:

- The healthcare organization's diagnosis and procedure coding guidelines for all resident types are based on current ICD-9-CM, CPT and HCPCS classification systems to ensure the accuracy and retrievability of pertinent information.
- The director of the health information management department supervises or monitors any diagnosis coding done outside the department to ensure the complete and accurate description of resident services.
- The director of the health information management department (or a designee) provides training and/or consultation to non- health information management staff who assign or analyze diagnoses codes.

Regulatory Requirements:

Under the federal Health Insurance Portability and Accountability Act (HIPAA) Transaction and Code Sets Standard (TCS), Subpart J, medical data code sets were adopted as the following code sets standards:

1. *International Classification of Diseases, 9th Edition, Clinical Modification, (ICD-9-CM)*, Volumes 1 and 2 (including the *Official ICD-9-CM Guidelines for Coding and Reporting*) for diseases, injuries, impairments, other health problems and their manifestations, and causes of injury, disease, impairment, or other health problems.
2. *ICD-9-CM, Volume 3, Procedures*, is to be used only for reporting procedures for hospital inpatients, and is, therefore, not used by long-term care facilities.
3. *National Drug Codes* (NDC).
4. *Code on Dental Procedures and Nomenclature*
5. The combination of *Health Care Financing Administration Common Procedure Coding System (HCPCS),* as maintained and distributed by HHS, and *Current Procedural Terminology, Fourth Edition (CPT-4),* as maintained and distributed by the American Medical Association, for physician services and other health care services. These services include, but are not limited to Physician services, Physical and occupational therapy services, Radiologic procedures, Clinical laboratory tests, Other medical diagnostic procedures, Hearing and vision services, and Transportation services including ambulance.

6. *HCPCS* for all other substances, equipment, supplies, or other items used in health care services. These items include, but are not limited to Medical supplies, Orthotic and prosthetic devices, and Durable medical equipment.

Source: 45 CFR §162.1002(a)

Adherence to the code sets listed in Section (a) has been adopted under HIPAA for all healthcare settings, including long-term care. Long-term care facilities should also be aware of the code sets in Sections (e) and (f) that have an impact on nursing facility reimbursements. (See Coding and Billing Relationships)

In February 2005, the Centers for Medicare and Medicaid Services (CMS) published MLN Matters Number MM3664 that revised the Medicare Claims Processing Manual (Pub.100-04, Chapter 6 (SNF Inpatient Part A Billing), Section 30 (Billing SNF PPS Services)), to include the following *ICD-9-CM* coding guidance for SNFs:

- Principal Diagnosis Code - SNFs enter the ICD-9-CM code for the principal diagnosis in FL 67. The code must be reported according to Official ICD-9-CM Guidelines for Coding and Reporting, as required by the Health Insurance Portability and Accountability Act (HIPAA), including any applicable guidelines regarding the use of V codes. The code must be the full ICD-9-CM diagnosis code, including all five digits where applicable.

- Other Diagnosis Codes Required The SNF enters the full ICD-9-CM codes for up to eight additional conditions in FLs 68-75. Medicare does not have any additional requirements regarding the reporting or sequence of the codes beyond those contained in the ICD-9-CM guidelines.

In CMS's *RAI User's Manual,* Section I, Disease Diagnoses, of the MDS 2.0, there is further guidance that reinforces that coding staff in long-term care facilities should refer to official coding guidance in assigning and reporting code numbers (Section I1, *Coding)* and that V codes may be used if they affect the resident's current ADL status, mood and behavior status, medical treatments, nursing monitoring, or risk of death (Section I3, *Coding)*. In Sections I1 and I2, *Process,* it clearly states that a physician diagnosis is required to code the MDS.

The coding process in long term care facilities primarily involves the use of the *ICD-9-CM* system for assignment of a diagnostic code to diagnoses, diseases, and conditions for a resident. *ICD-9-CM* coding is a key function for health information practitioners in a facility. It is critical that health information staff has adequate training and resources to accurately and completely assign diagnoses codes.

In a long term care facility, diagnoses codes are generally assigned on the face sheet/admission record, on the diagnosis/problem list, on the MDS, and for billing purposes on the UB-04. In HIPAA's Transaction and Code Sets, ASC X12N837 is used to identify this claim format. Assignment of diagnoses codes on the face sheet/admission record and diagnosis/problem list is not mandated by regulation, but is highly recommended. Reporting codes on the MDS and UB-04 are required.

Training and Resources

HIM STANDARD:

- Competent, credentialed clinical coders are recruited, hired and retained.
- Health information management employees who perform diagnosis coding functions attend educational programs related to their responsibilities, including orientation, on-the-job training, in-service education, and external educational opportunities.
- *ICD-9-CM*, *CPT* and *HCPCS* coding books and computer software are updated on an annual or biannual basis as the classification systems are revised.

In the Office of Inspector General's Compliance Program Guidance for Nursing Facilities, it states "The OIG recommends that a nursing facility, through its policies and procedures, take all reasonable steps to ensure compliance with the Federal health care programs when submitting information that affects reimbursement decisions. **A key component of ensuring accurate information is the proper and ongoing training and evaluation of the staff responsible for coding diagnoses and regular internal audits of coding policies and procedures. With the arrival of consolidated billing and the next edition of the coding manuals, it will be even more critical that knowledgeable individuals are performing these coding tasks**.

The risk areas associated with billing and cost reporting have been among the most frequent subjects of investigations and audits by the OIG. In addition to facing criminal sanctions and significant monetary penalties, providers that have failed to adequately ensure the accuracy of their claims and cost report submissions can have their Medicare payments suspended (42 CFR 405.371), be excluded from program participation (42 U.S.C. 1320a-7(b)), or, in lieu of exclusion, be required by the OIG to execute a corporate integrity agreement (CIA)." Federal Register/Vol. 65, No. 52/March 16, 2000, p. 14296

Training:

The health information practitioner in a facility should be trained on the proper use of the *ICD-9-CM* system. Ideally, this training should be through a formal course or program. If staff who code do not have access to a formal training course, at a minimum, they should attend a comprehensive coding workshop, have current resource materials available, and access to a trained, credentialed HIM consultant/professional for questions and clarification.

Under consolidated billing for Medicare, *CPT* and *HCPCS* codes are utilized to reflect services and supplies. LTC facilities should have health information staff who have basic training and an understanding of the *CPT* and *HCPCS* coding system.

Although coding should be completed by trained coders, if other staff (such as a MDS nurse, biller, or Medicare nurse) use the *ICD-9-CM* coding system, they should also be trained in the correct coding process, official coding guidance, and standards of ethical coding.

Resources:

- Current *ICD-9-CM* Code Books (code books are updated each year in October. New code books or updates must be purchased annually or biannually). All staff who code must have access to current code books. The *ICD-9-CM* database used for clinical and financial computer information systems must also be updated annually or biannually either by the vendor or by health information staff to reflect current, up-to-date diagnostic codes.
- Current *CPT* Code books (updated annually or as required).
- Current *HCPCS* code books (updated annually or as required).
- If staff who complete coding have not been through formal coding training, coding resource books for *ICD-9-CM* and *CPT/HCPCS* should be available. Basic coding handbooks are available through AHIMA and other coding vendors. AHIMA publishes a long term care resource for coding that will assist staff in the coding process. Go to Publications link at www.ahima.org
- The LTC facility should have a copy of the *ICD-9-CM Official Guidelines for Coding and Reporting* available on the Center for Disease Control website.
- Coders should be aware of and abide by the Standards of Ethical Coding.
- ICD-9-CM Coding Training Modules developed by the LTC Consortium are available to the public at The American Health Care Association website.
- All LTC facilities may subscribe to *Coding Clinic*, a quarterly newsletter published by the Official Office for *ICD-9-CM* coding. The newsletter provides official coding advice from the Cooperating Parties that is necessary for adherence to the transaction and code set standards required by the (HIPAA). Ordering information is available through the American Hospital Association at www.ahaonlinestore.org

Frequency of ICD-9-CM Coding

As a general rule of thumb, facilities should have a process to review the record, assign new *ICD-9-CM* codes, and report them on the diagnosis/problem list in the following timeframes:

Minimum Coding Frequency:

- Admission/Readmission: Each time a resident is admitted, readmitted, or returns from a hospital stay, the physician documentation (physician orders, history and physical, physician signed transfer form, hospital records, etc.) should be reviewed and diagnosis codes reported in the medical record. The diagnoses should be coded and reported in time to be used in completion of the MDS.
- Quarterly/Per MDS Schedule: At a minimum, the resident's medical record should be reviewed on a quarterly basis to coincide with the MDS schedule. The physician progress notes, orders, referrals/consultation reports, etc. should be reviewed for new diagnoses or resolved diagnoses.
- Discharge: To complete the disease index information (if one is being maintained) and have a record of all pertinent diagnoses, the medical record should be reviewed and new diagnoses coded and reported for billing and other record keeping purposes

Concurrent Coding:

Health information staff can also opt to code the record on a concurrent basis. Many facilities utilize a document for the listing of diagnoses, often titled Diagnosis List, that is initiated upon admission. It includes the diagnoses, *ICD-9-CM* codes, with the date of initial entry (admission). As the resident's treatments and cares are documented in the health record, diagnoses are updated, added and resolved in physician documentation. As diagnoses are updated during the resident's stay, it is beneficial to maintain the Diagnosis List by adding and resolving diagnoses with the applicable dates and assigning the *ICD-9-CM* codes. This process is often coordinated with the MDS assessment process when nursing staff identifies new diagnoses, while updating resolved conditions, as noted in physician documentation, and routes the information to the health information staff for coding. Another concurrent process is to assign codes based on the physician order entry into the clinical computer system. Concurrent coding helps to assure that the medical record and information system have up-to-date information on diagnoses at all times.

As residents may remain in long term care facilities for extended periods of time, the diagnosis listing can become extensive with numerous updates. If the inclusion of diagnoses is required on the face sheet/ admission record, it may be time consuming and difficult in the limited space to update this information on a concurrent basis. If possible, it may be helpful to indicate "Admission Diagnoses" with the diagnoses listed on this admission document while maintaining an up-to-date listing on the Diagnosis List. If the face sheet/admission record must be current, staff should develop a procedure for maintaining this document. Another consideration is that this face sheet/admission record document containing diagnoses may routinely be copied to provide resident information to appropriate individuals, agencies, or vendors. With HIPAA's requirement of "minimum necessary," routinely disclosing resident diagnoses via this document may no longer be desired or appropriate. Establishing policies and procedures for using and disclosing information on this document will insure compliance with state and federal regulations. See Section 4.9 Confidentiality and Release of Information. For documentation issues related to coding, see Section 6.8

Coding and Billing Relationships

The health information professional should be well versed and involved in the coding or monitoring process in a long term care facility and understand the link to the billing cycle. Billing staff must also recognize that accurate and complete *ICD-9-CM, CPT,* and *HCPCS* codes are necessary in accurate billing.

With the implementation of HIPAA's Transaction and Code Sets standards, both health care providers and payers must utilize the specified code sets and follow the official coding guidelines established for each code set when submitting electronic transactions (i.e. electronic billing/claim submission). Payers are no longer able to set their own rules for reporting diagnoses that conflict with official policy.

ICD-9-CM codes on a billing claim form usually provide information on the medical necessity of the services billed. Each code number represents a specific disease or condition for the resident that must be supported by physician documentation. An inaccurate diagnosis code used to justify services billed could potentially be considered fraudulent if the resident does not have the diagnosis used to justify the services utilized and billed.

CPT and HCPCS codes represent services or supplies. When a CPT or HCPCS code is reported on a claim form, the facility is indicating that the specific service or supply represented by the code was provided and medically necessary. It is important that all services and supplies represented by the CPT or HCPCS codes be supported by documentation in the medical record regardless of whether it is a Medicare part A claim (where all services are lumped together under one revenue code) or a Medicare part B claim (where each item is line item billed per service and per day).

Reporting Principal and Additional Diagnoses:

In the *ICD-9-CM Official Guidelines for Coding and Reporting,* in Section II, Selection of Principal Diagnosis, "The principal diagnosis is defined in the Uniform Hospital Discharge Data Set (UHDDS) as 'that condition established after study to be chiefly responsible for occasioning the admission of the patient to the hospital for care.'" This definition and other data elements were published in the Federal Register on July 31, 1985. As the guidelines go on to explain, the application of the UHDDS definitions has been expanded to include all non-outpatient settings (acute care, short term, long term care and psychiatric hospitals; rehab facilities; nursing homes, etc.). Since the publication of this definition in 1985, the reporting of reimbursement and diagnostic data on the UB-04 (ASC X12N837) has been required for healthcare settings other than just hospitals. Section III, Reporting Additional Diagnoses also includes the application of this definition.

This definition of principal diagnosis does not supersede the guidance related to LTC in *Coding Clinic* 4th Qtr 1999. In fact, these instructions appear to be very similar. In this *Coding Clinic*, the "first listed diagnosis" (principal diagnosis) can be interpreted to follow the UHDDS definition above: the condition after study to be chiefly responsible for the admission to the nursing home. Unlike the acute care hospital setting, the resident may remain in the nursing home for months and even years. As ongoing data regarding diagnoses needs to be reported to payers and to other regulatory bodies, it may be necessary to submit additional UB-04 (ASC X12N837) claim forms for specific time periods (usually monthly) throughout a resident's stay. Even though the UHDDS definition for principal diagnosis is "admission-focused," since it was developed for short-term, acute-care hospitals, there is a logical transition to apply the same concept for the resident that continues to stay in the facility -- the diagnosis chiefly responsible for the resident remaining in the nursing home.

There may be instances when the reason for a Medicare Part A services may not be the same as the reason the resident is in the facility (principal diagnosis). For example, a resident who is permanently living in the facility due to the residuals following a CVA may go to the hospital for pneumonia and returns to the facility. In this case, the principal diagnosis would be the code for the residual(s) of the CVA followed by the additional diagnosis of pneumonia.

There may also be situations when a Medicare service (e.g. therapy) is focused on a secondary condition of the resident's and not the principal diagnosis. As noted in Section 4.10 under Regulatory Requirements, the Medicare Claims Processing Manual includes directions for following ICD-9-CM coding guidance. CMS indicates that SNFs are to follow the official coding guidelines for the principal diagnosis, including applicable V codes. For other diagnosis codes, it stated that CMS does not have any additional requirements for the reporting or sequence of the codes beyond those contained in the ICD-9-CM guidelines.

As per this direction, CMS does not provide instruction for the sequence in which facilities

are to list additional ICD-9 codes. For example: diabetes mellitus does not have to be listed before Alzheimer's disease; COPD before urinary tract infection.

The ICD-9 classification system does have sequencing requirements for related diagnoses as directed in guidance in the ICD-9-CM codebook and the *ICD-9-CM Official Guidelines for Coding and Reporting* as diagnoses may require more than one code number to correctly identify the condition. Examples of guidance includes:

- Multiple Codes for Single Condition [Section I.B.9.]: Instructions in the Alphabetical Index or Tabular List identify need for additional codes ("Use additional code", "Code first underlying condition")

Example: Alzheimer's dementia (331.0, 294.10)

- Late effects [Section I.B.12.]: Guidance includes residual conditions (late effect) and indicates that the condition that remains (late effect) is sequenced first unless otherwise instructed (cause of late effect is usually listed second).

Example: Paralysis of left leg due to old poliomyelitis (344.30, 138)

- Etiology/Manifestation [I.A.6.]: "Code first", "Use additional code", and "In diseases classified elsewhere" notes indicate requirement to code underlying or associated condition(s). Code title in italics is always sequenced second. Example: Diabetes mellitus is the most common etiology/manifestation combinations

Examples: Diabetic ulcer (250.60, 707.1); diabetic chronic kidney disease (250.40, 583.81)

Complete data based on accurate ICD-9-CM coding is needed for:

- Acuity management by diagnosis
- Planning, Program management
- Resource utilization
- Internal data quality controls-diagnosis triggers quality indicators and quality measures (QIs/QMs)
- Reimbursement of services and care provided (UB04, Medicare Review- i.e. RAC, CERT, PCA)
- Education
- Research

Risks of inaccurate coded data include:

- Non-compliance with federal regulations for coding and billing
- Incomplete or inaccurate data submissions on MDS and UB
- Impaired or delayed cash flow due to denied or delayed claims
- Increased labor costs due to "work around" system to follow official guidance
- time consuming and inefficient use of staff time
- Inaccurate legal health record
- Medical necessity NOT accurately reflected
- Inaccurate clinical picture

Investigation of Claim Rejection/Denials due to Coding

Communication must be established and maintained between the billing and health information staff when billing claims are rejected or denied for coding reasons. It is not

appropriate for the billing staff to change the code without knowledge of the resident's current condition just to get a claim paid. Health information staff should be consulted to determine the reason for the rejection or denial such as an invalid code, lack of 4th or 5th digits, or improper sequencing. The reason for the denial/rejection should be investigated and the resident's record reviewed prior to resubmission. If necessary, consult with the Medicare fiscal intermediary (FI) or other payer. The facility staff may need to explain the guidance within the *ICD-9-CM* code book and the *ICD-9-CM Official Guidelines for Coding and Reporting.* If discrepancies remain on the reporting of the diagnoses codes, ask for the FIs coding advice in writing and keep a written log of phone calls, discussion, and recommendations. If they will not put their recommendations in writing, obtain the staff name and write a letter back to the FI or payer summarizing the advice received. Keep a copy of the letter with facility logs.

Coding Issues Under Consolidated Billing

Under consolidated billing (both Medicare part A and part B), health information and billing staff must be concerned with the accuracy of the vendor invoices received and billed under the facility's provider number. When a vendor bills the facility for services provided to a Medicare resident, they should provide the CPT/HCPCS code and date of service. To assure accuracy, the facility should have a process to review vendor invoices prior to billing Medicare. The goal of the review process is to assure that the service or supply was provided (based on medical record documentation), was ordered by the physician, and was medically necessary.

ICD-10-CM Coding Classification

In January 2009 the U.S. Department of Health and Human Services (HHS) announced two rules for the adoption of the *ICD-10-CM* and *ICD-10-PCS* code sets and the version of the standards for certain electronic health care transactions, under the authority of HIPAA (5010/D.0). AHIMA, along with its alliance partners, worked with members of Congress and government organizations to support the adoption of *ICD-10-CM a*smany countries around the world have adopted *ICD-10* including Canada and Australia.

The *ICD-9-CM* has become an obsolete (developed in the early 1970s) code set due to its lack of expansion and inability to capture health care data that reflects disease, procedure, and technology terminology specific to meet today's healthcare data needs. *ICD-9* is also no longer supported by the World Health Organization. *ICD-9* contains only 17,000 codes by contrast to the 155,000 specific codes that will accommodate new diagnoses and procedures. (*ICD-10-PCS* is the procedural classification and will not be used in LTC nursing homes.)

Significant changes in *ICD-10-CM* include expansion to approximately 68,000 available diagnosis codes. The diagnosis codes will be 3-7 characters in length: digit 1 is alphabetic; digits 2 and 3 are numeric; digits 4-7 are alpha or numeric. The system restructures chapters and categories, provides greater specificity of diagnoses, includes laterality for specific conditions, and has the flexibility for adding new codes. The specificity in *ICD-10-CM* will improve coding accuracy and the richness of data for analysis and the accuracy of data used for medical research. It will also support interoperability and the exchange of health data between other countries and the U.S. (Currently *ICD-9-CM* does not support interoperability because it is not used by other countries.)

Updated versions of current HIPAA electronic transaction standards require the use of the *ICD-10* codes sets for claims, remittance advice, eligibility inquiries, referral authorization, and other widely used transactions. The current standard, version 4010/4010A1 of the American Standards Committee X12 group, cannot accommodate the much larger *ICD-10* code sets. Under the transaction standards final rule, covered entities must comply with Version 5010 (for some health care transactions) and Version D.0 (pharmacy transactions) on January 1, 2012. Covered entities must comply with the standard for the Medicaid pharmacy subrogation transaction (Version 3.0) on Jan. 1, 2012. However, for Version 3.0, small health plans have an additional year and must comply on Jan. 1, 2013. These updated versions will replace the 4010/4010A1 versions of the current standard, will promote greater use of electronic transactions, and will accommodate the use of the greatly

expanded ICD-10 code sets. The ICD-10 code set rule sets the compliance date at Oct. 1, 2013.

Fact Sheet for both rules are available.

The Federal Rules can be accessed:

- Electronic health care transactions – Version 5010 of the X12 standard
- ICD-10-CM and ICD-10-PCS medical code set standards

The adoption of *ICD-10-CM* will require significant time, effort, and financial commitment to implement this redesigned classification system. HIM professionals will also have the opportunity to coordinate, communicate, and assist in the planning and implementation of this system. HIM professionals will be required to continue to obtain ongoing training to maintain coding skills. Ongoing information and training seminars are available at AHIMA at http://www.ahima.org/icd10/

Coding and the EHR

Currently, there is limited 'encoder-type' software to assist with code determination in nursing homes. Coding software in nursing homes is usually the *ICD-9-CM* library of codes in the system. This 'library' often contains the entire code book of the category, subcategory, and subclassification codes without notations as to the need for assigning codes to the highest level of specificity (4th or 5th digits) or to the requirements for proper sequencing. The library also may not contain include and exclude notes or other directional information that is needed for correct code assignment.

The software system must allow the coder to properly sequence codes for the entire Diagnosis List as required within the ICD classification system. If the system only allows staff to indicate the proper sequence, for instance, the first ten (10) diagnosis codes, the remaining codes will most likely be listed in numerical order. Without proper sequencing, the information will be confusing and misunderstood. In addition, improper sequencing of codes creates compliance issues, as the system would not allow staff to follow HIPAA's requirements for proper use of the *ICD-9-CM Code Book* and the *ICD-9-CM Official Guidelines for Coding and Reporting.* Staff should carefully review all codes directly interfaced to the claim form to insure the accuracy and applicability for that claim. See Section 4.10.3 above

As facilities develop and implement the electronic record, staffs using the software systems need to be aware of how the system is installed and utilized within the facility. Issues include:

- *ICD* code library:
  - Updates affecting diagnostic data, including *ICD* codes, should be available and able to be implemented on the effective date;
  - The pros and cons to customizing your *ICD* library: 1) Updates may remove individual customization; 2) Time taken to 'free-text' diagnostic language may be beneficial to staff's understanding of the diagnosis versus utilizing the codebook language, which may not be specific.
- As information is entered into the system, particularly physician orders, it may be necessary to code diagnoses on a concurrent basis.
  - Determine staff member that will assign codes on a concurrent basis
  - Insure staff member(s) are trained in accurate code assignment
- Staff should be aware of the way the software system organizes data from different points of entry. Staff needs to also understand how updates affecting clinical data impact on current functions and processes.

It is critical as electronic health record systems are developed, expanded, and updated that

facilities work with software vendors to maintain systems at a current level.

CCI Edits: The CMS developed the National Correct Coding Initiative (NCCI) to promote correct coding, to eliminate improper coding, and to ensure proper payments in Part B claims. Therapy services provided in SNFs are now included in this CCI edit process within the outpatient code editor (OCE). The purpose of the edits is to ensure the most comprehensive groups of codes are billed rather than the component parts. This will require facilities to assign the correct code(s), particularly for therapy services, from the *Current Procedural Terminology (CPT) Manual* for the appropriate medical diagnosis to reflect the services being provided and billed. Complete and accurate documentation will continue to be required to support these services.

The CMS website provides an overview and links to the applicable CMS manuals. Further information can also be obtained by searching "CCI Edits" on the CMS home page at http://www.cms.hhs.gov/.

'Computer-assisted Coding' is a tool that is being developed to automate the assignment of certain diagnosis codes from clinical documentation within an electronic system. Automation tools are being developed that allow computer software to assist in the translation of natural language processes (NLP) to extract pertinent data and terms from text documents and convert them into a set of medical codes. This information would then be reviewed and edited by coding professionals to assist in determining the code assignment. As EHRs become more fully developed, utilization of these tools is expected, particularly in the hospital setting.

Reference: AHIMA e-HIM Work Group on Computer-Assisted Coding. "Delving into Computer-Assisted Coding" (AHIMA Practice Brief). *Journal of AHIMA* 75, no. 10 (Nov-Dec 2004); 48A-H (with web extras).

LOINC code set (Logical Observation Identifiers Names and Codes) is an electronic database that provides a set of universal names and ID codes identifying laboratory and clinical (vital signs, intake/output, EKG, cardiac echo, imaging, etc.) test results. The purpose is to allow the exchange of clinical data, primarily laboratory, between compatible computing environments for clinical care, outcomes management, and research.

Reference: LOINC User's Guide edited by Clem McDonald M.D., Stan Huff, M.D., Daniel Vreeman, PT, DPT, Kathy Mercer. Updated June 2005
