

PROVINCIAL STANDARD FOR DATE/TIME DOCUMENTATION FORMAT

Approved by the
Provincial Health Information Management Leadership Committee
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FOR IMMEDIATE IMPLEMENTATION

Background

Documentation from multiple sources is used in the provision of care as well as in the overall administration of the organization. The accurate recording and subsequent interpretation of dated entries is fundamental to the effective operation and delivery of service and is paramount to supporting patient-client-resident safety and continuity of care. To avoid confusion and achieve clarity, the date/time format used for electronic and written documentation needs to be consistent to address ambiguity in documentation.

In March 2008, the Provincial Health Information Management Leadership Committee discussed the lack of consistency in the format used in electronic and paper documentation to record dates and time. The need for a provincial standard was identified and research undertaken to identify existing standards which may be relevant to consider for adoption.

Date Format Standards Considered

ISO 8601 (*Date elements and interchange formats – Information interchange – Representation of dates and times*) is an international standard for date and time representations issued by the International Organization for Standardization (ISO). The signature feature of ISO 8601 date and time representation is the ordering of date and time values from the most significant to the least significant or, in plain terms, from the largest (the year) to the smallest (the second). The standard is meant to apply to all written communications that contain dates, times and time intervals regardless of the communication medium (printed, electronic, or handwritten).

The Canadian National Standard CAN/CSA-Z234.4 *All Numeric Dates and Times*, prescribes the writing, typing and printing of dates and times when all numeric forms are used. This standard ensures that the dates must be clearly designated and not open to misinterpretation. The CSA Standard is the Canadian adaptation/adoption of ISO 8601.

The International System of Units (SI) also endorses the use of the ISO 8601 standard. SI is the standard adopted for the units of measure by many clinical systems. It is the basis of the units of measure for the pan-Canadian LOINC Observation Code Database. This database will be the foundational data standard of the provincial EHR Lab system.

The HL7v3 pan-Canadian Messaging Standards, Data Types Specifications, Artifact Version v1.2, Release package V02R02.3 provides implementation, compliance and conformance guidelines specific to data types and data type components. Specifications for date and time follow the ISO standard in that date is represented as YYYYMMDD and time is represented as HHMMSS.

Digital Imaging and Communications in Messaging (DICOM) conforms to the American National Standards Institute (ANSI), Healthcare Information Standards Planning Panel, Message Standards Development Subcommittee standard of yyyyymmdd.

The ISO standard is endorsed and used by the Government of Newfoundland and Labrador Office of the Chief Information Officer for electronic documentation.

The provincial community health sector information system, the Client and Referral Management System (CRMS) uses the ISO standard to denote date and time.

Other considerations

Meditech is the primary clinical electronic documentation source used by the regional health authorities (RHA's) in Newfoundland and Labrador. Meditech systems use day/month/year (dd/mm/yy) for date format. The scope of Meditech implementations in the province impacts the implementation of the ISO 8601 standard in day-to-day activity. Discussion with Meditech indicates that the date format is a parameter that is set in the original formatting of the regional hospital information system. Once it is defined, it cannot be changed unless or until such time as the RHA's move to a new Meditech platform, i.e., Meditech Version 6.0. The potential for date format change should also be kept in view in the event that the structure of the Meditech implementations in the province should change, e.g., a single Meditech solution for the province.

While the input date format in Meditech is consistent, e.g., ddmmyy, the display format is not consistent. For example, Meditech's Patient Care Inquiry (PCI) displays the date as day/month/year using three alpha characters for month and two digits for year.

Provincial EHR Systems and CRMS follow the ISO standard with physician office systems, transcription systems, DIPACS, etc., generally using the ISO standard either for input, output or both. Changes to CRMS would have to be approved through the CPIS Steering Committee.

Purpose

The purpose of this provincial standard is to ensure a standardized format for documenting date and time information is achieved over time within the health system in Newfoundland and Labrador.

Requirements

ISO 8601 (Date elements and interchange formats – Information interchange – Representation of dates and times) is the standard to be adopted for the date and time format for electronic documentation. It is acknowledged that some systems cannot be made compliant with this standard in the short term.

To minimize the current variations in formats used for clinical documentation and the associated ambiguity, it is recommended that, where possible, alpha characters be used to display the month (minimum of three characters) and four digits used to display the year.

For hand-written documentation the month must be recorded in full or by use of the standard abbreviation for that month. E.g. November or Nov. The year must be recorded in its entirety. While any order for day, month, year is acceptable as long as the month and year are recorded as above, the preferred order is year/month/day. E.g. 2008 Nov 10, 2008 November 10.

Time is to be recorded starting with the largest unit (e.g., hour, minute, second) using the 24-hour system. Units of time are separated by a colon (e.g., 18:21:08).

Daylight Savings Time (DST) should be noted in hand-written documentation by appending DST to the first recorded note following the Daylight Savings Time adjustment in the Spring and Fall.

The standard acknowledges that in some instances of electronic clinical and administrative applications, the system predetermines the date format in documentation. Where possible the printed output and the view screens of these applications should adhere to the ISO 8601 date format standard.

Where exceptions to the policy are necessary as a result of hardcoded system parameters, the situation is to be identified and the date format variance appended to the regional policy.

All new system acquisitions, as well as existing systems, are to be evaluated in terms of compliance to the ISO 8601 date/time format standard and every effort made to resolve same. Regional health authorities and the NL Centre for Health Information should ensure corporate policies are consistent with this standard.

Questions regarding this standard can be directed to:

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Distribution: Provincial HIM Leadership Committee, Provincial Coding Committee, Provincial IM & IT Directors Group, NLCHI. Regional representatives to distribute to appropriate staff within their organizations.