NHS CUI Design Guide Workstream

Design Guide Entry - Terminology - Disambiguation and Error Correction

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NHS CUI Design Guide Workstream, Design Guide Entry - Terminology - Disambiguation and Error Correction
Prepared by NHS CUI Programme Team, Version 1.0.0.0 Baseline
Last modified on 18 August 2006

TABLE OF CONTENTS

1 INTRODUCTION

This document presents an introduction into the guidance and recommendations for aspects of Terminology user interfaces related to models of Disambiguation and Error Correction.

This document should be read in conjunction with the following Design Guide documentation:

- *DG-R3-004 Design Guide Entry - Terminology - Searching*
- *DG-R3-004 Design Guide Entry - Terminology - Elaboration*
- *DG-R3-004 Design Guide Entry - Terminology - Display Standards for Coded Information*
- *DG-R3-004 Design Guide Entry - Terminology - Post Coordination*
- *DG-R3-004 Terminology Requirements*
- *CFH_CUI_HAZARD_LOG_TERMINOLOGY_R3*

Please ensure you also read the following Design Guide documentation:

- *Accessibility for Clinical Applications* {R2}

Note

This document provides a brief introduction for the Design Guide Entry for Terminology UI Interaction Models of Disambiguation and Error Correction. The detailed guidance is provided in context within the other four Terminology Design Guide Entry documents that are listed above. Please refer to the relevant document for the error correction and disambiguation guidance that you require.

1.1 Overview

This document is for the use of anyone whose role includes screen design, implementation or assessment of a NHS clinical application and is involved in creating or evaluating terminology user interfaces.

Terminology user interfaces operate within a note-taking environment. These environments fall into three categories (as illustrated in Figure 1 and described below), each of which require different guidance:

- **Forms**
  - The user makes notes by ticking boxes and choosing options, not by entering text
  - An encoding interface is not needed – the clinical codes should be embedded within the form itself
- **Code and elaborate**
  - The user makes notes by selecting a clinical code (such as 'asthma'), and elaborating it with other codes (such as 'severe') and unencoded text (such as 'mother anxious')
  - Encoding interfaces require components to search for and elaborate clinical terms

- **Free text parser**

    - The user makes notes by writing text, then identifies and encodes words and phases within that text

    - Encoding interfaces require components to identify and manage clinical terms within the text, as well as components to search for, and elaborate, clinical terms
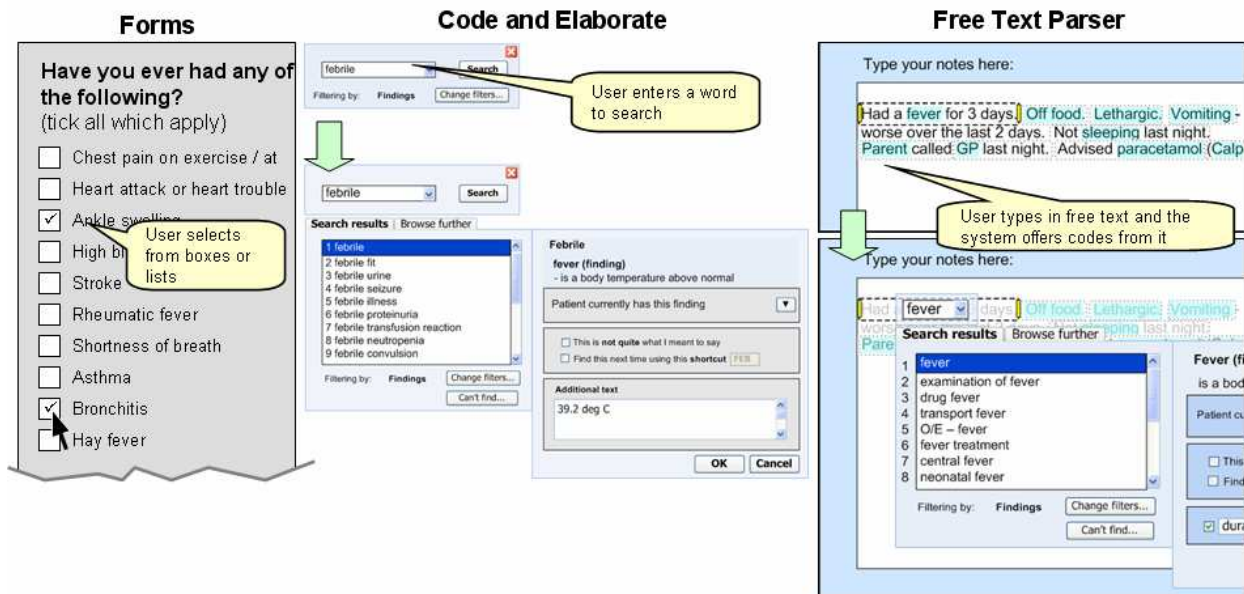

Figure 1: Styles of Encoding

Medical language is full of abbreviations and jargon, some of which have more than one meaning. By encoding clinical statements, they can be shared unambiguously. This should improve patient safety by reducing confusion, or errors, due to ambiguity in clinical notes.

Encoding also opens up important opportunities, such as:

- Unambiguously sharing clinical statements between clinicians in different disciplines or institutions

- Using decision support mechanisms, based on codes within clinical statements, to enhance patient safety

- Auditing clinical activity by using codes to locate and report on specific types of information within patient records

- Researching clinical practice or outcomes in the NHS by extracting codes from electronic patient records

NHS CFH has chosen SNOMED-CT as the terminology for encoding clinical statements.

1.2 Area of Focus

This document aims to describe Models of Disambiguation and Error Correction within a terminology interface, as illustrated in Figure 2 below.
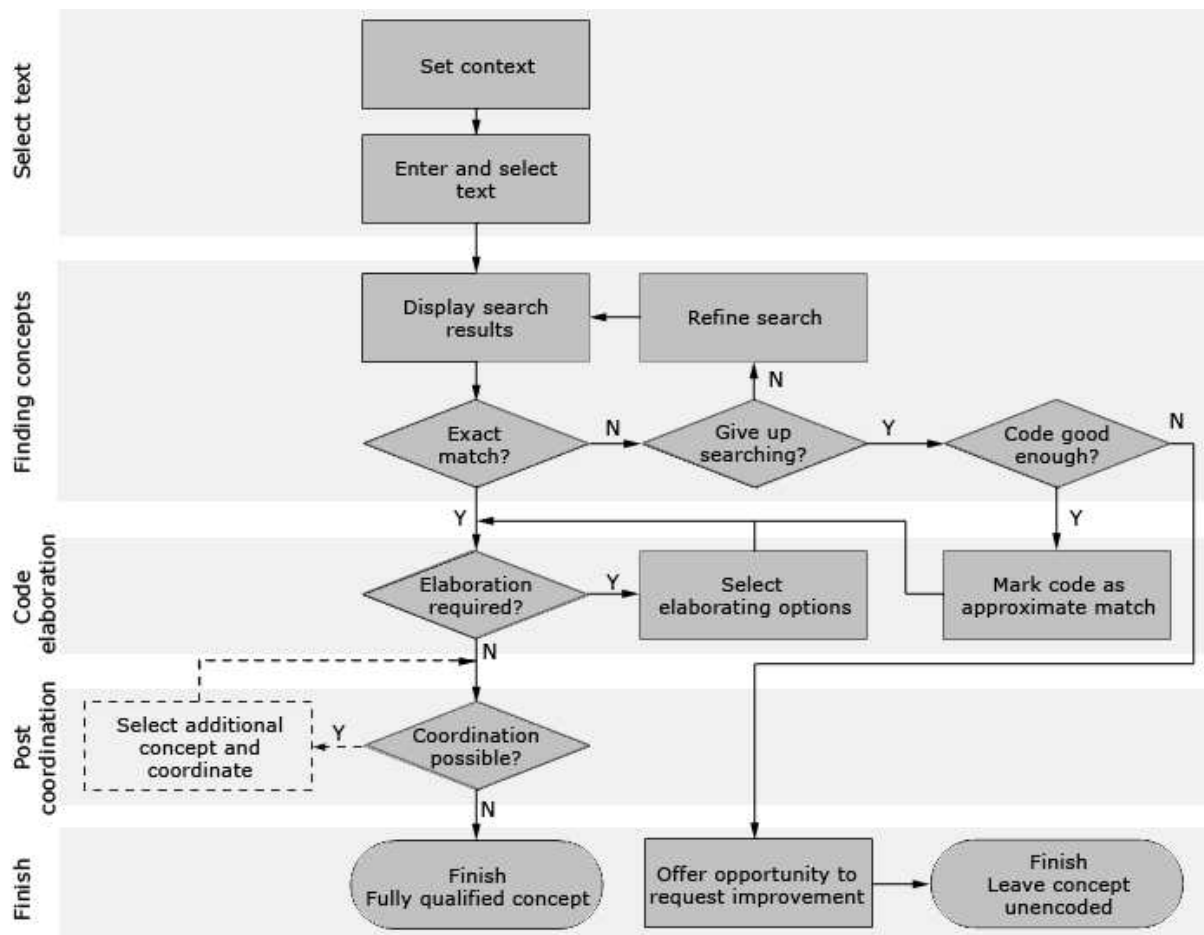

Figure 2: Terminology Overview

Current guidance on error correction and disambiguation is presented in context in:

- *DG-R3-004 Design Guide Entry - Terminology - Searching*
- *DG-R3-004 Design Guide Entry - Terminology - Elaboration*
- *DG-R3-004 Design Guide Entry - Terminology - Display Standards for Coded Information*
- *DG-R3-004 Design Guide Entry - Terminology - Post Coordination*

1.3   References to Table of Contents Document

The document *Table of Contents* {R1} outlines every specific area of focus to be covered by the Design Guide. Each area of focus has an accompanying Design Guide Entry document. Table 1 indicates the areas of focus covered by this Design Guide Entry.

Table of Contents Reference	Description	Level of Completeness
4.5	Disambiguation and Error Correction	25%

Table 1: References to Table of Contents Document

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2 DOCUMENT INFORMATION

2.1 Terms and Abbreviations

Abbreviation	Definition
CUI	Common User Interface
NHS	National Health Service
NHS CFH	NHS Connecting for Health

Table 2: Terms and Abbreviations

2.2 Definitions

Term	Definition
NHS Entity	Within this document, defined as a single NHS organisation or group that is operated within a single technical infrastructure environment by a defined group of IT administrators.
The Authority	The organisation implementing the NHS National Programme for IT (currently NHS Connecting for Health)

Table 3: Definitions

2.3 Nomenclature

Cross References

Cross references to other sections in the current document comprise a section number. Cross references may also be to figures and tables, where the caption number only might be shown.

References to other Project documents are shown in *italics*. Footnotes with additional details may also be used.

2.4 Audience

The audience for this document includes:

- **Authority CUI Manager / Project Sponsor**. Overall Project Manager and sponsor for the NHS CUI Project within the Authority.

- **Authority NHS CUI Design Guide Workstream Project Manager.** Responsible for ongoing management and administration of the Workstream.

- **The Authority Project Team**. This document defines the approach to be taken during this assessment and therefore must be agreed by the Authority.

- **Microsoft NHS CUI Team**. This document defines the approach to be taken during this assessment, including a redefinition of the NHS CUI Design Guide Workstream strategy.

2.5   Open Issues Summary

Issue	Raised By	Action to Resolve
None		

Table 4: Open Issues Summary

2.6   References

Reference	Document	Version	Date
R1.	NHS CUI Design Guide Workstream - DG-R2-011 Table of Contents	1.0.0.0	04-Apr-2006
R2.	Accessibility for Clinical Applications – QW Accessibility 1000.doc	1.0.0.0	31-May-2006
R3.	DG-R3-004 Design Guide Entry - Terminology - Searching	1.0.0.0	18-Aug-2006
R4.	DG-R3-004 Design Guide Entry - Terminology - Elaboration	1.0.0.0	18-Aug-2006
R5.	DG-R3-004 Design Guide Entry - Terminology - Display Standards for Coded Information	1.0.0.0	18-Aug-2006
R6.	DG-R3-004 Design Guide Entry - Terminology - Post Coordination	1.0.0.0	18-Aug-2006
R7.	DG-R3-004 Terminology Requirements	TBD	TBD
R8.	CFH_CUI_HAZARD_LOG_TERMINOLOGY_R3	TBD	TBD

Table 5: References