



# CRIS Letter Formats



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# Introduction

## Purpose

This document is designed for exclusive use in conjunction with the CRIS Letters Training Course.

The '2 Day' CRIS Letters Training Course has been developed to enable customers to make modifications to their own CRIS Appointments Letters, and develop the skills required to introduce new Letter Formats such as alternative Prep Letters, Conditional Letters, Information Sheets and Questionnaires.

The course utilises a practical approach and is designed to enable delegates to acquire the knowledge and skills required to successfully maintain CRIS Appointment Letters, negating the need to request quotes for letter amendments or log calls with the CRIS helpdesk.

## Audience

CRIS Letter formats utilises a certain amount of simple programming clauses and although this can be mastered by any user given the appropriate amount of individual consolidation and practice, Magentus would recommend that anyone attending this course has reasonably high levels of computer literacy. Delegates would also benefit from some experience of conditional programming statements (If, Else etc.) although this is not essential to attending the course.



# Document Control

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<b>Authorised by</b>		<b>Date</b>	
<b>Review Date</b>			



# Course Overview / Timetable

## Part 1 (Day 1): CRIS Basic Letter Modification and Simple Letter Creation

### Course Timetable

1030 - 1230	Delegates Arrival - Course Commences
1230 - 1300	Lunch
1300 - 1500	Delegates Return - Course Continues
1500 - 1530	Afternoon Break
1530 - 1700	Delegates Return - Course Continues and Concludes with Q & A Session

### Course Overview

The concept for 'Day 1' Letter Training is that a 'new' hospital is opening within the Trust with new Departments which will require Appointment Letters with Directions, and associated Examination Preparations.

This exercise is designed to introduce the following principals:

- Making use of the CRIS 'Format Tool' to 'Back-up' or 'Restore' Letter formats.
- Overview of all Tables used to Facilitate Letter Creation and Letterhead Naming Conventions - i.e. Trusts, Sites, Referral Sources, Referral Locations, Departments, Rooms, Exams Per Hospital, Examination Codes and Print Content Editor.
- Basic Amendments to 'Departments Table' due to a Change in Telephone Number/Appointment Clerk.
- Basic Amendments to Hospital 'Directions' to include details of new parking costs.
- Basic Amendments to Examination Prep - in this example adding a General Ultrasound Letter.
- Streamlining Letter Content and increasing content clarity through the use of supplementary 'Info Sheets'.
- Further Streamlining exercise to create MRI General Information, leading onto creating an MRI Questionnaire and Info Sheet during the second day.
- How to utilise 'Conditional Prep' in this example for 'Children Under a Specific Age' - Child 2-5 years old = A cup of water, Child Under 2 = Half a cup.
- Using the optional 'Letter' field to create alternative Letters - in this example how to create an 'Exam Specific' Letter for an 'Ultrasound Fast & Full Bladder'.
- How to utilise 'Pronouns' in CRIS Letters (You/He/She/They rather than 'The Patient').

## Part 2 (Day 2): Advanced Letter Format Creation

### Course Pre-Requisites

All delegates must already have attended 'Part I - CRIS Basic Letter Modification and Simple Letter Creation' in order to undertake this session.



## Course Timetable

0900 - 1230	Delegates Arrival - Course Commences
1230 - 1300	Lunch
1300 - 1600	Delegates Return - Course Continues and Concludes with Q & A Session

## Course Overview

During this session we will build on the concepts undertaken during Day 1 Training covering the following:

- Alternative LMP text - in this example creating text to use the 28-day rule, in addition to the standard text for the 10 Day rule.
- Use of AM & PM Preparation - in this example how to add a letter for a Barium Meal Prep with differing AM and PM instructions for adults and children.
- Use of alternative 'In Patient' Preparation Letters - in the example an 'In Patient Barium Meal'.
- Overview of the CRIS Status Codes and 'Status Codes' table to enable the Trust to create letters specific to individual statuses rather than the overall category - i.e. Request, Waiting, Cancelled vs. Request Rejected, Waiting - Partial Booking 1, Cancelled etc.
- How to create a site-specific Letter associated with particular 'Status' codes using two exercises:
  - How to add a letter to the cancellation status 'CPDNA - DNA Card Returned Status' to enable sites to print the same letter for Auto DNAs, and vetted DNA's.
  - How to add site specific letter for use with the 'Partial Booking Letter' to advise the patient that we have tried to contact them by phone, and they should now contact us. This is for use with a new status 'Telephoned' recommended for use in 'Direct Booking' situations.
  - How to add specific letters for Rejected or Cancellations status codes.
- How to create a Questionnaire to send out with the Appointment Letter - in this example we will introduce an MRI questionnaire.
- Final Practical Exercise - Delegates are encouraged to bring their own sample 'Letter(s)' to generate using principals learnt over the last 2 days. It would also be advisable to bring this in an electronic 'Word Pad' format using .rtf (rich text) to expedite the process, rather than typing from scratch.
- We will also look at the inclusion of Images within letters to enable Maps to be incorporated into directions information where applicable.

## Creating and Editing CRIS Letters & Info Sheets

The CRIS System enables Letter Formats such as alternative Prep Letters, Conditional Letters, Information Sheets and Questionnaires to be generated and printed.

All information required to create context specific letter formats is contained within the CRIS System Tables and can be configured per Trust, Site, Modality, Examination, in addition to a number of other variables such as gender, age and patient type.



## Overview of All Tables Used to Facilitate Letter Creation

The following Set-up tables are used to determine the content and appearance of CRIS letters:

### SET-UP TABLES > PLACES > TRUSTS

This table is used to print the Trust Name. The 'Type' field via this table determines the format of the Trust name as type 'N' will print 'NHS Trust', whilst type 'P' will instead print as 'Primary Care Trust' for use with community hospitals.

### SET-UP TABLES > PLACES > REFERRAL SOURCE

This table is used to generate the full Hospital Address on all output formats. It should also be noted that any Community Hospitals should have a PCT code to initiate the printing of 'Primary Care Trust' instead of 'NHS Trust'.

### SET-UP TABLES > PLACES > SITES

This table is used to identify the relevant Site (Hospital) and its related Trust. This information is used to connect the correct Site/Trust configuration tables and letter formats which will then be utilised in generating associated letter formats.

### SET-UP TABLES > PLACES > DEPARTMENT

This table is used to populate key departmental details via output formats including the following:

- Department Name
- Primary Phone Number
- Contact Name
- Department Name 2
- Other Phone Number
- Link to relevant 'Directions'

It is also essential to ensure that each 'Room' has the appropriate entry via the 'Department' field to enable 'Appointment Letters' print the correct details.

### SET-UP TABLES > PLACES > ROOMS

This table is used to control the rooms in which examinations can be performed and to connect the room an appointment is booked to the 'Sites' and 'Departments' table which will then be utilised in generating associated letter formats.

If a room is not linked to a department, then no department contact details will print on the letter. This typically manifests as 'NODEPT', 'NOPHONE' and 'NOCONTACT' and the letter will similarly not display any relevant directions.

### SET-UP TABLES > PLACES > REFERRING LOCATIONS

This table is used to identify if a standard Outpatient Letter (letter\_appt\_1) or an Inpatient Letter (letter\_inpatient) should be generated based on the 'Patient Type' field. This enables the Trust/Site to have differing letter formats based on patient type - i.e. Formal Letters to Patients, Information Sheets to Wards.

If the outpatient and inpatient instructions are the same or are not required (i.e. No alternative inpatient letter format exists) the system will default to the standard outpatient letter format.



## SET-UP TABLES > OTHER TABLES > APPOINTMENTS > EXAMS PER HOSPITAL

This table is used to connect the 'Rooms' table to the 'Departments' table, and to identify any specific Preparation 'Letter', 'LMP Text' or 'Preparation Time' which should be generated on the resulting Appointment Letter.

Preparation Letters can be Examination or General Preparation specific - i.e. A Full Bladder or Starve preparation which could be applied to a number of Exams, or a specific preparation which is only applicable to a single procedure.

**LMP Text** - can be left as blank which will default to the standard LMP Text, or set as a specific 10, 28, or alternative rule.

**Preparation Time** - the number of minutes which should be subtracted from the booked appointment time - i.e. 09:00 appointment with 30 mins of prep time will print as a 08:30 arrival time on the appointment letter.

## SET-UP TABLES > OTHER TABLES > APPOINTMENTS > DIARY SET-UP

This table is used to create diaries for appointment booking in conjunction with the 'Exams Per Hospital' table.

## SET-UP TABLES > OTHER > GENERAL > EXAMINATION CODES

This table is used to generate the name of the examination(s) that the patient will undergo during their appointment. There are two fields used in letter printing - 'Name' which will simply generate the standard national examination name, or the alternative 'Letter Name' which allows a more "patient friendly" examination name to be printed on appointment letters instead of the standard examination name.

For example, instead of 'MR Head with Gadolinium' you could enter a letter name of 'MR Brain Scan' which will then display on the patient letter.

This table is NOT hospital specific in 'Datacentre / Consortium' models where all hospitals and trusts share a server. Any sites on a shared 'Datacentre' environment wishing to use letter names must gain the agreement of all other RIS users.

This table also contains the 'LMP Sensitive' field which if ticked is used to indicate that an LMP/Pregnancy Warning should be printed on letters for applicable patients.

## SET-UP TABLES > SYSTEM > NORMAL TABLES - 'CRISLET' TABLE

The CRISLET table is used to enable different letters to be generated for the same 'Examination' code, or 'Status Type' - i.e. Instead of a standard Full Bladder Prep, in certain circumstances a 'Fast & Full Bladder' may be required, or a Diabetic prep instead of the standard prep.

The CRISLET field populates the [F4] Help list via the Event Details screen which allows the user to choose an alternative letter which is reciprocally linked the alternative letter formats.

CRIS also enables Trust and Site-Specific Letter codes, but you should not exceed the maximum number of characters already in use via this table (i.e. if the largest code is 4 characters do not exceed this with any subsequent codes).



## SET-UP TABLES > SYSTEM > XR SETTINGS

There are two XR Setting which influence 'Age Clauses' in Letter Formats.

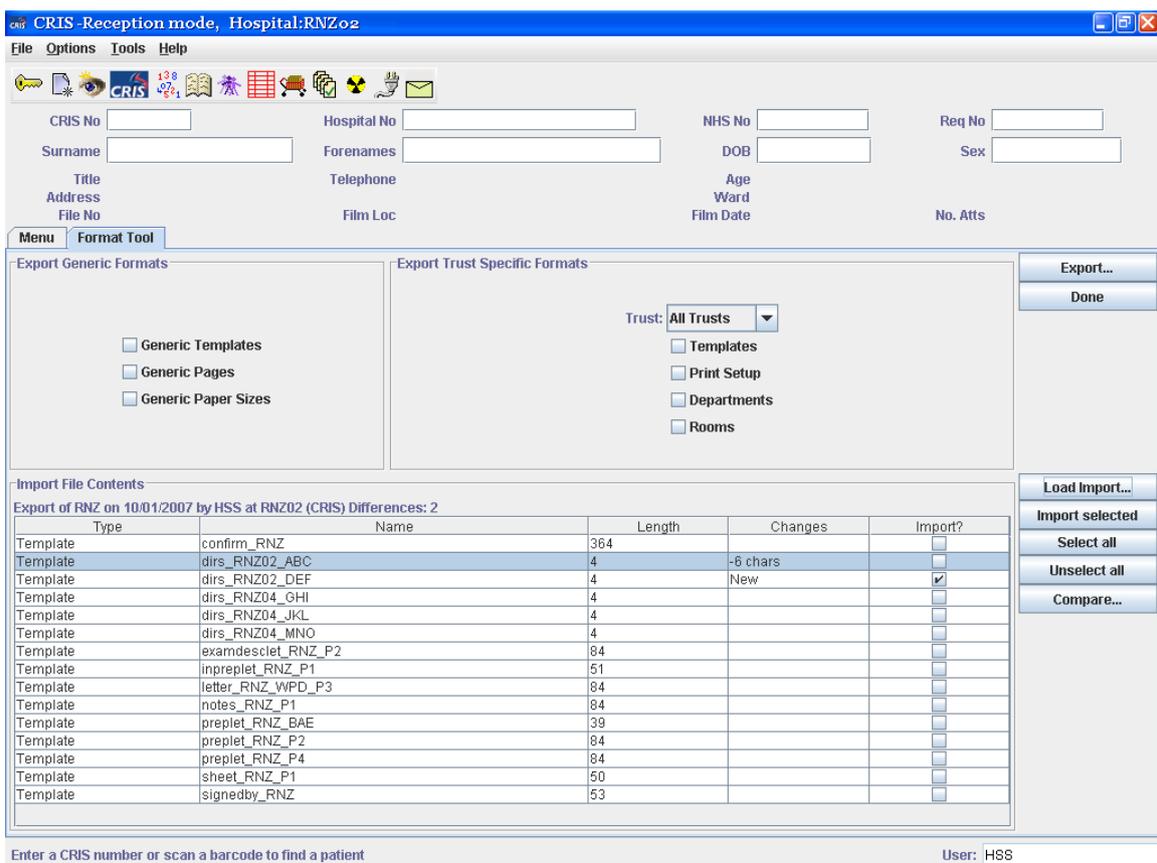
- APPOINT.AdultAge                      The age at which patients are considered adults for appointment letters.
- APPOINT.ObsAdultAge                The age at which patients are considered adults for obstetric ultrasound appointment letters.

**Please note:** The ObsAdultAge setting may not be implemented at all sites. Consequently, if it transpires that this does not function as expected you should contact the helpdesk who will update your Letter Templates to facilitate this.

## Format Tool

Before beginning to edit any letters, The Format Tool is used to export and import both generic and site-specific printing configuration. This tool can be used for backing up formats before making changes, or for copying formats between Oracle instances at the same site.

The **Format Tool** can be found on the CRIS Tools menu under Server.



In the screenshot above - The top half is for Format Exports (i.e. Saving database configuration to a file). You can choose what generic formats to export, and what site-specific formats to export from which trust. You can select more than one type at a time. The bottom half is for format imports (i.e. Loading from a file into the database). In the above screenshot a file has been loaded which contains 15 rows. Two of these rows are different to what is currently in the database and may be imported.



**EXPORTING** - Choose what types of formats to export by clicking the boxes. For site specific formats, you can choose either a specific trust or all trusts. Clicking [Export] will show a file dialog. In this you can choose a directory to save the export file to. CRIS generates the filename automatically. Export files are automatically compressed to reduce their size.

**IMPORTING** - Click [Load Import] and select the file to import. The table below will then list the contents of the file. Nothing will be actually imported until Import selected is clicked. The line above the table displays where the file came from - what trust was exported, the date of export, what user performed the export, what site the user is at, the database instance name, and the number of rows that differ to the current database.

The table lists the objects in the file and compares them to the current database:

- Type and Name indicate what object the row represents.
- Length is the length in characters of a text description of the object.
- Changes indicate how Length compares to the database. If blank, there are no changes. Otherwise, either an object is changed (as with dirs\_RNZ02\_ABC) or is new (i.e. not yet in the database, as with dirs\_RNZ02\_DEF above).
- Import has a checkbox for every row. If an object is new or changed, then the user can choose to import or ignore it by clicking the checkbox. If there are no changes, then naturally it is not possible to import the row. By default, new rows are automatically selected for import, but changed rows are not.

The buttons [Select all] and [Unselect all] may help with importing a large number of formats. If a row is changed, selecting the row and clicking [Compare] will open a compare window with the database object on the left and the file object on the right.

Once the correct rows to import have been selected, the [Import selected] button will copy them into the database. As this occurs, the rows will update to show no difference between the file's object and the database.

## General Composition of CRIS Letters Formats

### SET-UP TABLES > SYSTEM > PRINT SET-UP

The 'Print Set-up' table is used to define the 'Print Content Elements' for all Output Formats including the Letter format used by the Trust.

The 'Page' section is used to assign the required Page Layouts (i.e. let\_appt\_1 b and let\_appt\_1\_pg2)

'Content Area' is auto populated and displays the relevant areas of information contained in each letter which is typically as follows:

hospaddr	All details printed in hospital address section derived from Trusts, Referral Source and Departments Table in addition to other items such as Date, Hospital Number as applicable.
pataddr	All details printed in patient address section derived from the Patient Record.



letter (let\_appt\_1b) Content area of the letter which includes patient salutation, appointment date and time, examination details and any associated preparation. This section also contains any LMP details, directions, appointment confirmation and signature details.

letter (let\_appt\_1\_pg2) Continuation page which is automatically updated by any changes to letter.

This table should not be modified, although the Trust can amend the Font Size for one or all sections of the 'Content Area' if absolutely required. This is undertaken by double-clicking where the font and size are displayed and making any necessary amendments. It should however be noted that the Trust should not modify the 'Font' itself as this could lead to issues regarding print clarity, and the **NHS standard is Arial, Point 11.**

### SET-UP TABLES > SYSTEM > PRINTING

The 'Printing' table is used to control the composition of 'Page Layouts' for all Output Formats including content area sizing and content items.

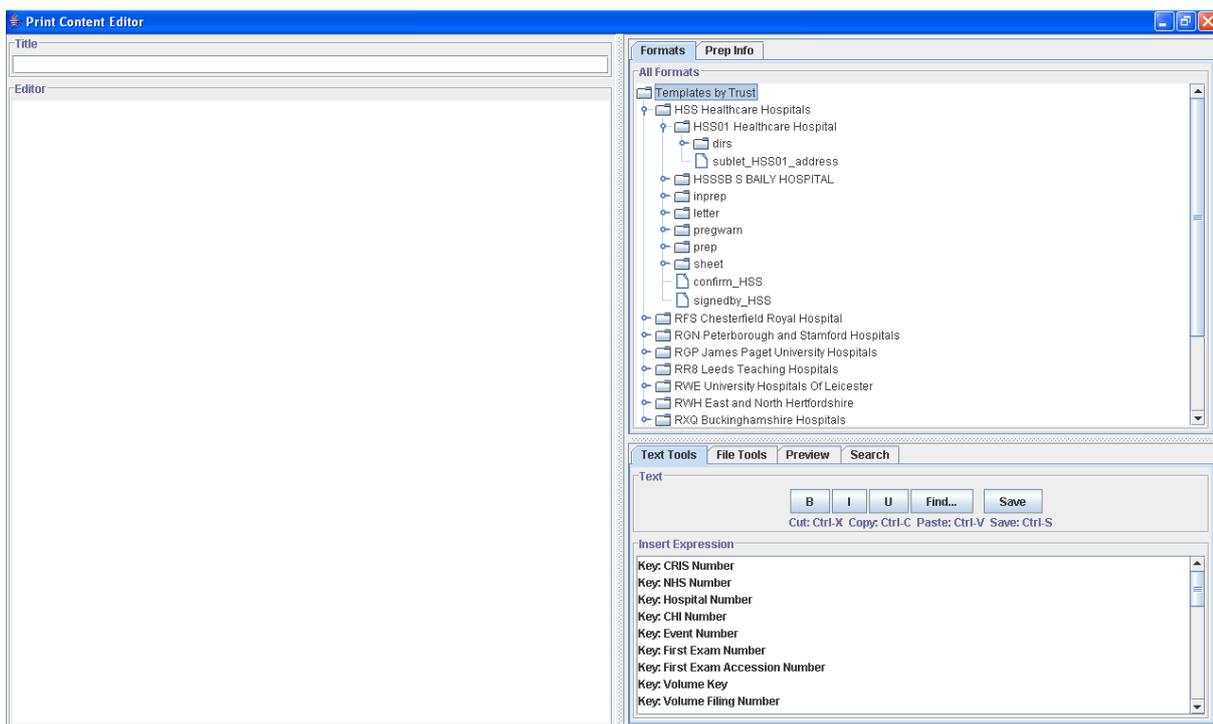
An average letter comprises (usually '**let\_appt1b**' or **Trust equivalent**) of the following sections:

- **sublet\_hospital\_address\_date**
- **sublet\_patient\_address** (Prints Patient, Referrer or Nurse Address)
- letter which calls '**letter\_appt\_1b**' or '**letter\_inpatient**' and both utilise '**letter\_gen\_APD**'

This table should not be modified, unless directed to do so by the CRIS Helpdesk.

## Overview of the Print Content Editor

The print content editor is accessed via SET-UP TABLES > SYSTEM > PRINT CONTENT EDITOR. The Print Content Editor is used to create and edit all elements of letters is comprised of the following elements:

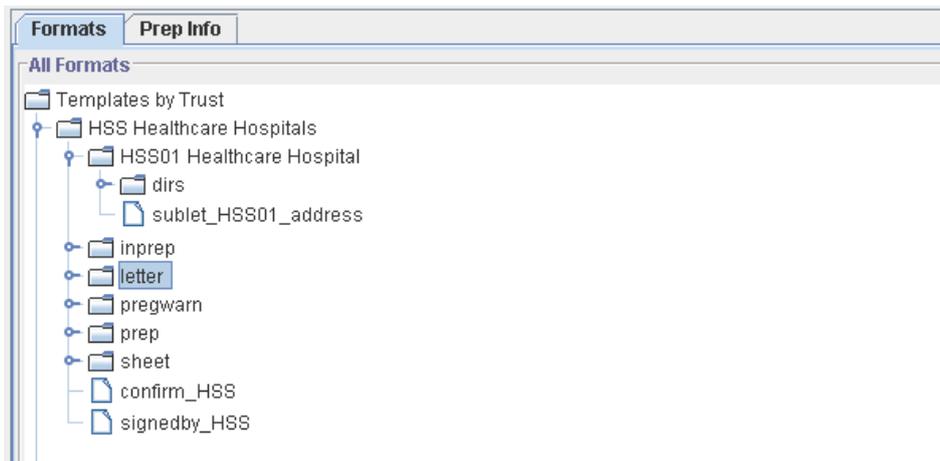




Templates	All Letter Format Templates currently in use at either Trust/Site level or Generic Templates supplied by Magentus.
Texts	Read Me statements which explain Letter Formats.
Scripts	For use by Magentus only.
Pages	For use by Magentus only.
Images	Where all images used in formats are stored.
Print Set-up	For use by Magentus only.
Scratchpad	For use by Magentus only.

### Trust Templates

The letter templates are by Trust and Site in the folder 'Templates by Trust'.



Letter Format	Description of Purposes
Prep Letter Options / Format:  preplet_TRUST /SITECODE_examcode  prepmoD_TRUST/SITECODE_Modality Code	'Preplet' and 'PrepMod' formats are used to generate prep letters, and associated information per examination or modality.  Example formats: Examinations Specific = preplet_HSS_FBAEN or preplet_HSS01_FBAEN. Modality Specific = prepmoD_HSS_F or prepmoD_HSS01_F  <b>Please note:</b> DO NOT make any letter code suffixes more than 6 characters in length.
inpreplet_TRUST/SITECODE_prepletcode	'Inprep' formats allow In Patient versions of existing examination specific 'preplet'. You should ensure that the code for the 'inpreplet' matches the same code as the standard 'preplet' - i.e. preplet_HSS_FBAEN



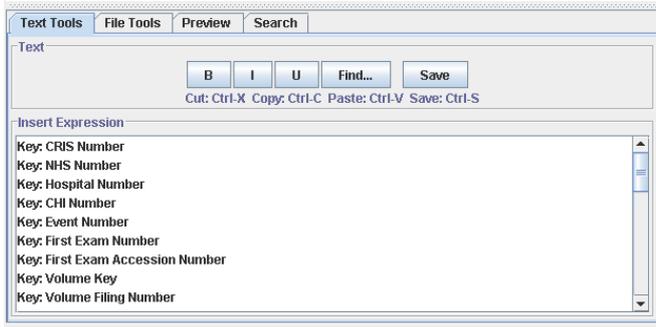
	<p>Example formats: Existing standard letter = preplet_HSS_FBAEN so the In Patient version should be inpreplet_HSS_FBAEN or preplet_HSS01_FBAEN.</p> <p><b>Please note:</b> If the outpatient and inpatient instructions are the same or are not required (i.e. No alternative inpatient letter format exists) the system will default to the standard outpatient letter format.</p>
sheet	<p>Information 'Sheet' formats print on a separate page after appointment letters which some sites find useful in improving the clarity of Appointment letters. To utilise this format select "Exam Preparation Info Sheet" and enter the existing 'preplet' or 'prepmo' code</p> <p>Example formats: If the existing standard letter for Barium Enema is = preplet_HSS_FBAEN the reciprocal Information sheet should be sheet_HSS_FBAEN. In the case of Modality Prep Sheets this would be prepmo_HSS_U with a reciprocal sheet_HSS_U.</p> <p>These are usually created as info sheets for existing preparations but can also be used with #parse statements.</p>
Letter	<p>'Letter' formats are used for alternative 'Event Letter' formats - i.e. Where a different prep is required for the same examination, or where a different generic letter is required - i.e. CPDNA letter.</p> <p><b>Please note:</b> The use of a # prefix followed by the Event Let code negates the need to add the velocity statement #if (\$event.Letter == "PATDNA").</p>
Pregwarn	<p>LMP text printed automatically unless the patient is male, or is definitely younger than 12 or older than 55, or none of the exams are marked LMP sensitive in ExaminationCodes.</p> <p><b>Please note:</b> You should have a pregwarn TrustCode which is used as standard. However on 1.06.12 it is also possible have different LMP - i.e. 10, 28 or Other per exam.</p>
Directions	<p>Used for creating directions text at your hospital based of codes specified via the Departments Table. You should always include a site code and not a trust code, as directions are to a specific hospital and not a trust.</p>
Confirm	<p>Used to detail all confirmation text which should be detailed at the bottom of the letter.</p>
signed by	<p>Standard signed by text specified via the Departments table.</p>

**Please note:** Code Suffixes can be up to 6 characters.



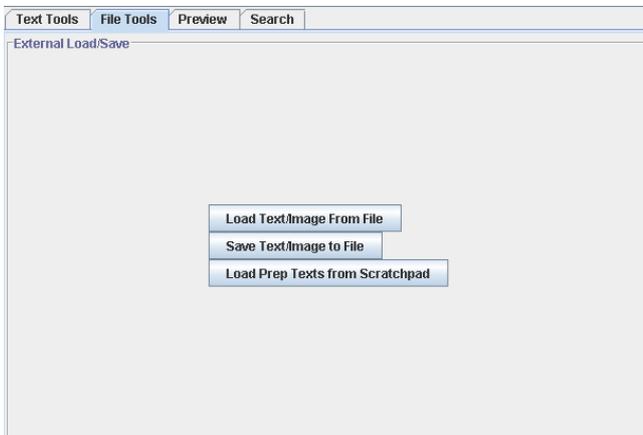
## Print Format Utilities

### Text Tools



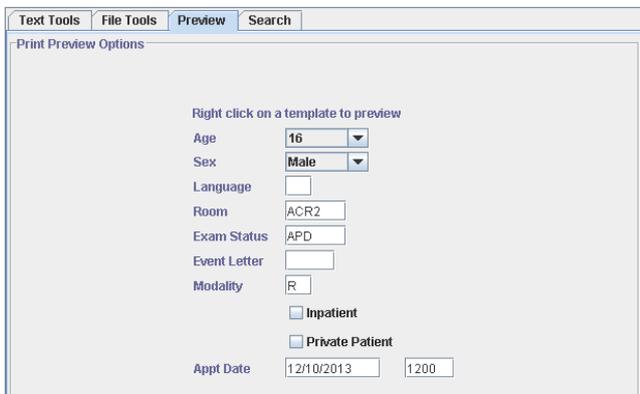
User Friendly Velocity Statements which allow you to add either 'Data Items' from Patient records or to utilise #if #else #end variable programming statements.

### File Tools



This tool is used to import images for use in letter formats - i.e. Maps for directions. These can be PNG, JPEGS and GIF not TIFF or BMP. It can also be used to import .txt files to negate the need to type content into formats.

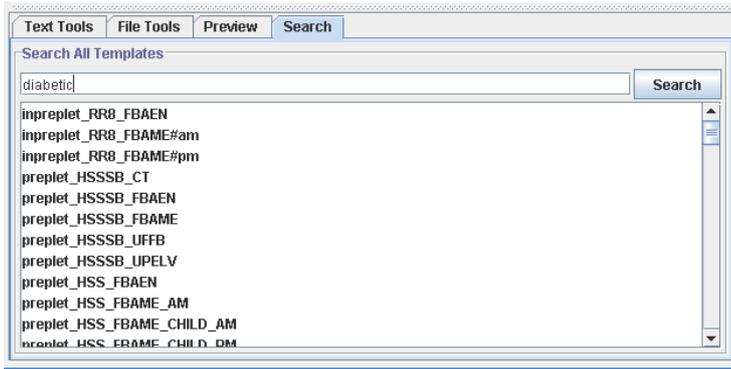
### Preview



This user-friendly utility enables you to test letters in conjunction with the right-click 'Page Preview' tool based on the combination of all relevant context items such as Age, Sex, Language, Room, Exam Status, Event Letter, Modality, Inpatient, Private Patient, Appointment Date and Time.

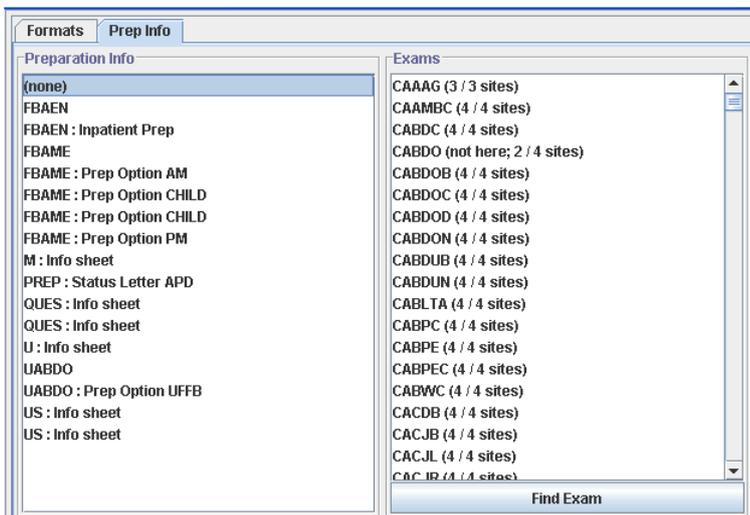


### Search



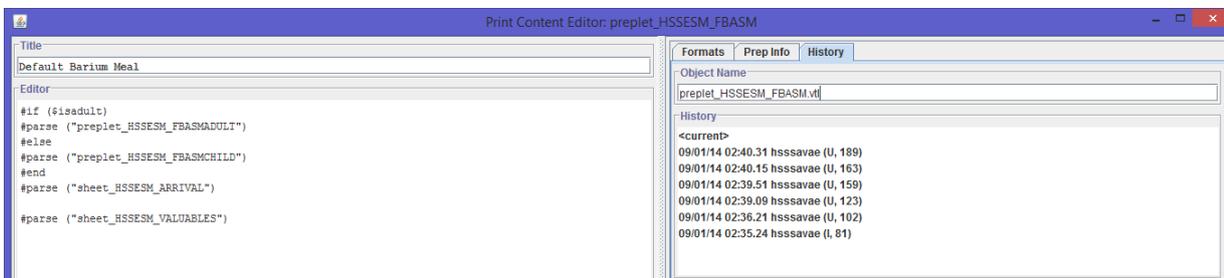
Used to enable text searching throughout all templates – i.e. where is the word ‘diabetic’ used. This features then enables you to view the formats as required.

### Prep Info



Shows which prep codes have been assigned via ‘Exams Per Hospital’ table – i.e. which sites are using specific prep, or alternatively if ‘None’ is selected shows exams without any specific prep.

### History



Shows an audit trail of format changes including date, time and user to date and clicking on each format shows the text content at the time of the last change.



# Standard Letter Composition

**Healthcare Hospitals**   
NHS Trust

**7**

**1** CT Department  
Healthcare Hospital  
Hamilton Court  
Oakham Business Park  
Mansfield  
NG18 5FB

**4**

**1** Telephone: 01623 48 98 20  
Date: 06-Oct-2013  
Hosp No: 45217HSS

Mrs Mary Poppins  
249 Mary Poppins' Street  
Mary Poppins' Area  
Mary Poppins' Town  
Mary Poppins' County  
B1 4WP **2**

Dear Mrs Poppins **2**

**1**

An appointment has been made for you to attend the **CT Department** for the following:

For: **CT Abdomen with contrast** **2**  
On: **09 October 2013 at 10:00 am**  
At: **Healthcare Hospital, CT Department**

**4** **1**

**Preparation**

Please have nothing to eat for 4 hours prior to your appointment time, a SMALL DRINK is allowed. On arrival at reception, you will be given a special drink which has to be taken before your scan. The appointment time allows for you to have the drink in time for the scan. The scan will take place approximately one hour later than the appointment time. We have very limited waiting facilities and would ask you not to arrive earlier than we have requested. **3**

It is recommended that this type of examination is performed within the first 10 days after the onset of your menstrual period and that you are not pregnant. **6**

Please attend the CT Department located within the Imaging Department Red zone level 2 off the main hospital corridor. **5**

**Please bring this letter with you when you attend.** **5**

Alternatively, if you are unable to attend for your appointment please contact us immediately for an alternative date. Your prompt action will enable us to offer this appointment to another patient.

Yours Faithfully,  
Appointments Clerk **1**

**2** E-32765 

Key:

- 1** Departmental
- 2** Patient Demographics / Event Details
- 3** Preparation Info
- 4** Fixed from Event Site
- 5** Departmental Text
- 6** Pregnancy Warning
- 7** Optional Header logo



## Key to Standard Letter Composition

No.	Template Name	Description of Purpose
7	Optional Header Logo	Optional NHS or PCT Trust Header derived from the Trusts Table and including standard NHS Logo.
1 (4)	sublet_hospital_address_date	Automatically Generated using Departments Table, Referral Sources Table and Patient Details (If applicable)
2	sublet_patient_address	Automatically Generated using Patient Details
<b>Letter (letter_appt1 and letter_gen_APD)</b>		
2 (4)	#parse ("dear")	Generates the "Dear patient" line, automatically changes to "Dear parent of guardian of" for patients under 16 years old. Letters intended for the referrer are addressed to the referrer instead of patient.
	#parse ("apptmade")	This generates the first line of a patient appointment letter (e.g. "an appointment has been made for you to attend the department...").
	#parse ("examlist")	Prints the For/On/At section which lists examination times.
3	#parse ("prep") or ("inprep")	Trust/Site, Exam/Modality Definable Outpatient or Inpatient Preparation.
6	#parse ("pregwarn")	Trust/Site, Exam/Modality Definable LMP for female patients where DOB is Unknown, or between 12 - 55 years.
5	#parse ("directions")	Site Definable Directions activated via the Departments table.
5	#parse ("confirm")	Trust/Site Definable confirmation text which typically includes details such as "please bring this letter when you attend" or "please telephone us if you are unable to attend this appointment.
-	#parse ("examdesc")	Not Applicable to most sites.  Example formats: exam_desclet_TRUSTCODE_precode orexam_descmod_TRUSTCODE_modalitycode.
1	#parse ("signed_by")	Letter sign-off which typically includes a trust or site-specific message such as "On behalf of the X-Ray Department" and is generated from the Departments table.
3	#parse ("sheet")	Trust/Site/Exam Definable Information Sheets which prints on a separate page.



## Pronoun Substitution

Pronoun substitution is used to automatically change the wording of the letter based on whether the recipient is an adult, child, or inpatient.

This requires the pronouns (words like "you", "your", etc) in the preparations to be converted to variable references which will substitute the appropriate text. This is done by putting a dollar sign "\$" at the start of the word.

Example Format:

'An appointment has been made for \$you at 12.00pm' will be substituted as follows depending on the age and patient type:

- Adult: "An appointment has been made for you at 12.00pm."
- Child: "An appointment has been made for your child at 12.00pm."
- Inpatient: "An appointment has been made for your patient at 12.00pm."

Variable	Adult	Child	Inpatient
\$are	are	Is	is
\$have	have	Has	has
\$youare	you are		your child is
\$youarehs	you are	he/she	is
\$youhave	you have	your child has	your patient has
\$youhavehs	you have	he/she	has
\$you	you	your child	your patient
\$youheshe	you	he/she	he/she
\$youhimher	you	him/her	him/her
\$your	your	your child's	your patient's
\$yourhisher	your	his/her	his/her
\$s		S	s
\$es		es	es
\$do	do	does	does
\$yourtheir	your	their	their
\$youthey	you	they	they
\$youthem	you	them	them
\$childhave	have	let your child have	let your patient have

The he/she type variables are gender specific, so it actually substitutes "he" or "she" depending on the sex of the patient. If the gender is indeterminate or not set, then it uses both ("he/she" etc). All these variables are available in lowercase, mixed case, or capitalised (e.g. \$you, \$You and \$YOU).

**Every time you use a variable pronoun, preview the format and read the sentence carefully** from the perspective of an adult and a child, otherwise you can easily miss subtle errors (especially from lack of \$s and \$es).

You do not have to substitute every pronoun. For example, the following sentence does not make sense: \$You should make an appointment with \$your doctor to discuss \$your results.

Try to use the gender-neutral pronouns for the first pronoun in a sentence, and the he/she style ones for subsequent pronouns - i.e. If \$you experience\$s discomfort, we recommend \$youheshe takes \$yourhisher usual painkillers.



## Using Velocity Statements

Velocity statements can be used to introduce conditional clauses, data items and text formatting into CRIS letters. The most common Velocity expressions can be found in the Text Tools of the Print Content Editor.

### Basic Conditional Statements

- **AGE CONDITIONS** - If the preparation depends on whether the patient is a child or an adult, you can use a 'Conditional' statement as follows:

- **OPTION ONE - ADULT AND CHILD** - Conditional Statement which only relates to adults over 16, or children and infants under 16:

```
#if ($isadult)
```

```
It is essential to have a full bladder for this examination.
```

```
#else
```

```
Please make sure your child has a full bladder for this examination.
```

```
#end
```

- **OPTION TWO - PATIENTS OF A CERTAIN AGE OR ABOVE** - Conditional statement for patients 16 or over.

```
#if ($patient.Age >= 16)
```

```
This DOES NOT APPLY if you have been sterilised, have had a hysterectomy, are taking the contraceptive pill or willing to sign a form stating that there is no chance of you being pregnant.
```

```
#end
```

- **OPTION THREE - CHILDREN UNDER 2** - Conditional Statement if the preparation relates to a specific age range - i.e. Infants of 2 years or less, Children between 3 and 16, and Adults.

```
#if ($patient.Age <= 2)
```

```
Your child must drink at least half a cup of water 90 minutes before their appointment time. After drinking the water your child should not go to the toilet.
```

```
#elseif (!$patient.dob || ($patient.Age > 2 && $patient.Age < 16))
```

```
Your child must drink at least a cup of water 90 minutes before their appointment time. After drinking the water your child should not go to the toilet.
```

```
#else
```

```
It is essential to have a full bladder for this examination.
```

```
#end
```

- **OPTION THREE - UNDER 12 MONTHS** - Conditional Statement if the preparation relates to multiple age ranges - i.e. Infants less than 12 months old, 1-2 years or less, Children between 3 and 16, and Adults.

```
#parse("months")
```

```
#if (($patient.Age == 0) && ($months < 11))
```

```
~BINFANTS PREP - UNDER 12 MONTHS~b
```



Infants who do not have bladder control should have as much fluid as they can tolerate about 30 minutes before the ultrasound scans.

```
#elseif (!$patient.dob || ($patient.Age >= 1 && $patient.Age < 3))  
~BCHILD PREP - 1 - 2 YEARS OLD~b
```

Your child must drink at least half a cup of water 90 minutes before their appointment time. After drinking the water your child should not go to the toilet.

```
#elseif (!$patient.dob || ($patient.Age >= 2 && $patient.Age < 16))  
~BCHILD PREP - 3 - 16 YEARS OLD~b
```

Your child must drink at least a cup of water 90 minutes before their appointment time. After drinking the water your child should not go to the toilet.

```
#else  
~BADULT PREP~b
```

You must have a very full bladder. Drink approximately 2 pints of water 90 minutes before your appointment time. Please drink this over a period of 30 minutes. After drinking the water DO NOT go to the toilet.

```
#end
```

- **GENDER CONDITIONS** - If a paragraph only applies to females, you can use this condition:

```
#if ($patient.sex != "M")  
This text will appear if the patient is female.  
#end.
```

**Please note:** This clause uses if not equal to Male rather than equal to Female to ensure gender specific prep prints for Female, Unknown or Indeterminate.

- **REQUEST CATEGORY CONDITIONS** - If a paragraph applies only to private patients, use this condition:

```
#if ($event.request_category == "P")  
Please note that we only accept cheques in payment.  
#end
```

- **MODALITY SPECIFIC CONDITIONS** - If a paragraph applies only to certain modalities:

```
#if ($firstexam.Modality.matches("[OU]"))  
Modality text here  
#end
```

- **EXCEPTION IF CLAUSES** - It is also possible to create exception #if clauses where the inclusion of an exclamation mark before the #if statement means 'IS NOT'.

```
#!if ($firstexam.Modality.matches("[OU]"))
```



Modality text here  
#end

- **AM OR PM SPECIFIC PREPARATION** - If preparation varies based on the appointment time.

```
#if ($firstexam.BookingTime.CompareTo("1200") <= 0)
Use this clause if the prep is specific to Appointments booked at 1200hrs or before 1200hrs
#elseif ($firstexam.BookingTime.CompareTo("1700") < 0)
Use this clause if the prep is specific to Appointments booked before 1700hrs
#else
Optional clause if the preparation is different for any appointments after 1700hrs
#end
```

- **ALTERNATIVE OPTIONS:**

```
#if ($firstexam.BookingTime.CompareTo("1200") < 0)
Use this clause if the prep is specific to Appointment booked before 1200hrs
#end
```

```
#if ($firstexam.BookingTime.CompareTo("1200") >= 0)
Use this clause if the prep is specific to Appointments booked at 1200hrs or after 1200hrs
#end
```

```
#if ($firstexam.BookingTime.CompareTo("1200") > 0)
Use this clause if the prep is specific to Appointments booked after 1200hrs
#end
```

## Appropriate Use of the #end Clause

Please note that any #if or #foreach clauses used in a format, a reciprocal #end clause is required for the format to function as expected.

#elseif clauses do not however require a reciprocal #end clause.

For example: ##There are 3 x '#end' due to the presence of 2 x #foreach and 1 x #if in the following format.

Dear \$printManager.getReferrerName(\$event.referrer),

The following radiology request has been ~BREJECTED~b as it failed to meet the guidelines for requesting diagnostic procedures as defined by the Directorate.

```
#foreach ($exam in $event.exams)
```

```
~BExamination(s) Requested:~b${exam.description}#foreach ($s in $firstexam.StatusHistory)
```

```
#if ($s.StatusCode.Category == "C")
```

```
~BRejected / Cancelled on:~b $pm.shortdate($s.Date)
```

```
~BReject / Cancel reason:~b $s.StatusCode.ShortDescription
```

```
~BAdditional Comments:~b $s.Description.replaceAll("~", " ")
```



```
~BPatient: $patient.getName(true,true)~b  
~BDate of birth:~b $patient.getdobString()  
~BNHS Number:~b $patient.getnhs_number()  
~BHospital Number:~b $patient.gethospital_number()  
~BCRIS Number:~b $patient.getcris_number()
```

```
#parse("signed_by")  
#end  
#end  
#end
```

## Using #parse Statements to Utilise the Same Format in Multiple Letters

It is much simpler and time effective to make use of #parse statements to utilise one format in multiple letters. The #parse statement literally means "Go and get something" and therefore allows you to reference/include another format to enable you to reuse the same paragraph(s) over and over without having to cut and paste into multiple formats.

This also means that should you need to update the paragraph later - you only have to update it in one place and the change will be applied to all associated formats.

```
#parse("preplet_name_here")
```

or

```
#parse("sheet_name_here")
```

The #parse statement is also used to insert any standard data template fields - i.e. #parse("deptphone2")

## Using \\NEXTAREA

This \\NEXTAREA statement is used to force a 'page break' in any prep letter or information sheet, which allows you to better control the formatting of a letter or information sheet.

**Please note:** It is also possible to use !NEXT AREA as an alternative, and this may be present in existing formats.

## Changing Font Size

It is also possible to apply font size changes to sections of formats - for example to reduce the size of additional formats such as questionnaires or to increase the size of font for 'Alternative Large Font' letter options as required.

To do this apply \\SIZE 10pt before the appropriate text and \\ENDFONT at the end of the appropriate text to ensure that all subsequent text is restored to default font and size.

## Using Day Formulas

You can use any of the following velocity 'days' statements by entering #parse("days") at the top of the preplet or sheet and inserting the relevant variable.

```
$fivedaysbefore  
$fourdaysbefore
```





Example Format: Original Prep Letter = preplet\_Trust/Site Code\_USFB, new alternative Event Letter Prep = preplet\_Trust/Site Code\_USFB#UFFB

**METHOD TWO (IN THE EVENT THERE IS MORE THAN ONE ALTERNATIVE LET OPTION)**

The following statement can be used at the top of any standard preplet:

```
#if ($event.Letter == "UFFB") where 'UFFB' equates to the CRISLET code
#parse ("preplet_HSS_UFFB") where 'preplet_HSS_UFFB' equates to the alternative letter.
#elseif ($event.Letter == "UFFC")
#parse ("preplet_HSS_UFFC") where 'preplet_HSS_UFFC' equates to the alternative letter.
#else
Details from the original preparation letter
#end
```

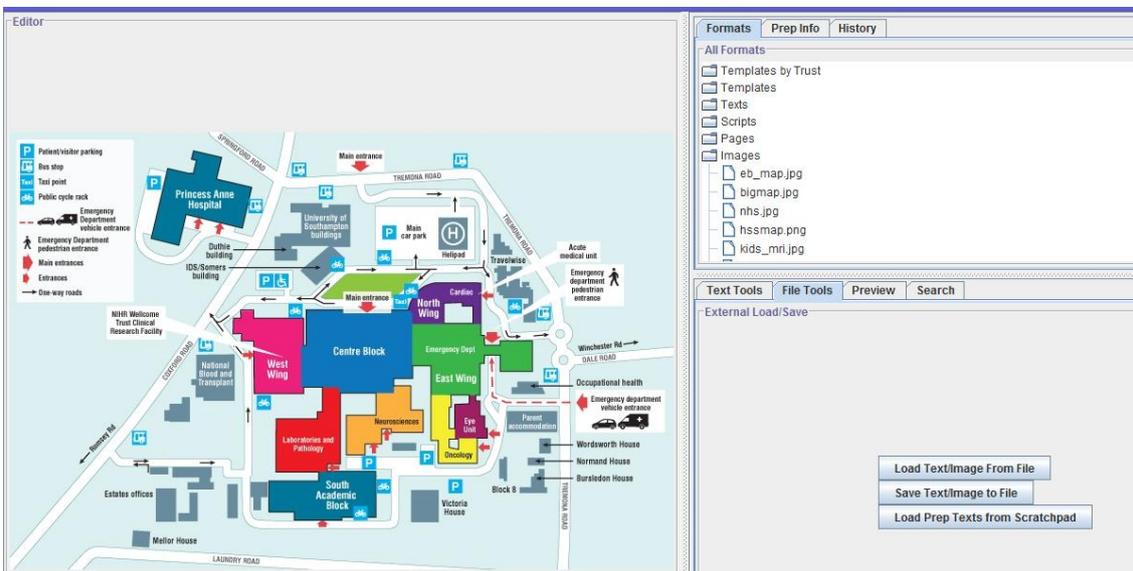
### Inserting Images into Letter Formats

It is now also possible to include images within Letter formats – i.e. Maps for directions, Images for inclusion in the place of prep letters etc.

To do this you will first need to save the appropriate image as a JPG, JPEG, PNG and TIFF file formats.

**Please note:** The filename should not have any spaces or unsupported characters i.e. - dash ~ tilde etc.

This can then be imported via File Tools > [Load Text / Image from File] and having located the file and clicked [Open] the image will be saved to the 'Images' folder.



To insert the image into a letter the following code is required:

```
\\IMAGE then_enter_filename.jpg
```

It is also possible to centre the image on the page or apply pixels to set the width of the image which will then also scale vertically as follows:

```
\\IMAGE image.jpg centre
```

OR

```
\\IMAGE image.jpg 200pt centre
```



## Using Status Comments in Letters

CRIS Letters can be configured to insert status comments into letter formats which is useful when creating letters used for rejected requests, or cancelled events where a bespoke comment has been entered via the status comment field.

### CANCELLED STATUS COMMENT:

##There are 3 x '#end' clauses due to this format having 2 x '#foreach' clauses and 1 x '#if' clause.

Dear \$printManager.getReferrerName(\$event.referrer),

The following radiology request has been ~BREJECTED~b as it failed to meet the guidelines for requesting diagnostic procedures as defined by the Directorate.

#foreach (\$exam in \$event.exams)

~BExamination(s) Requested:~b\${exam.description}#foreach (\$s in \$firstexam.StatusHistory)  
#if (\$s.StatusCode.Category == "V")

~BRejected / Cancelled on:~b \$pm.shortdate(\$s.Date)

~BReject / Cancel reason:~b \$s.StatusCode.ShortDescription

~BAdditional Comments:~b \$s.Description.replaceAll("~", " ")

~BPatient: \$patient.getName(true,true)~b

~BDate of birth:~b \$patient.getdobString()

~BNHS Number:~b \$patient.getnhs\_number()

~BHospital Number:~b \$patient.gethospital\_number()

~BCRIS Number:~b \$patient.getcris\_number()

#end

#end

#end

#parse ("signed\_by")

## Addendum - Miscellaneous Velocity Statements

The CRIS Print Content Editor uses Velocity which is a Java-based template engine	
Appointment is booked after or at 1200hrs	#if (\$firstexam.BookingTime.compareTo("1200") >= 0) ***text here*** #end
Appointment is booked after 1200hrs	#if (\$firstexam.BookingTime.compareTo("1200") > 0) ***text here*** #end
Appointment is booked before or at 1200hrs	#if (\$firstexam.BookingTime.compareTo("1200") <= 0) ***text here*** #end
Appointment is booked before 1200hrs	#if (\$firstexam.BookingTime.compareTo("1200") < 0) ***text here*** #end



<p>Condition dependant on age (e.g. patient is aged 13-55)</p>	<pre>#if (!\$patient.dob    (\$patient.Age &gt;= 13 &amp;&amp; \$patient.Age &lt; 55)) ***text here*** #end</pre>
<p>Show a day in the past e.g. if the patient needs to take medication necessary for the examination before the exam, the letter will usually state this.</p>	<p>First you will need to parse the template called 'days', it will need to be added to the top of the format, like so:</p> <pre>#parse ("days")</pre> <p>Then you can add the following codes in the body of the text to show a date in the past (in days before the exam):</p> <pre>\$daybefore \$twodaysbefore</pre> <p>This will add in the day in full caps, an example letter is shown below:</p> <pre>#parse ("days")</pre> <p>In preparation, please take 2 of the enclosed Bisacodyl tablets \$twodaysbefore evening.</p> <p>If the above exam is on Wednesday, the letter will read:</p> <p>"In preparation, please take 2 of the enclosed Bisacodyl tablets MONDAY evening."</p>
<p>Rebook an appointment 7 days after the first exam.</p> <p>This can also be given a negative figure to show a date before the appointment date.</p>	<pre>\$pm.longdate(\$pm.addDays(\$firstexam.BookingDate, 7))</pre>
<p>If there are custom letters set up enter this formatting.</p>	<pre>#if (\$event.Letter == "****Name as entered in CRISLET in formats****") #parse ("dear")</pre>



<p>Enter the name of the format into the CRISLET table in the normal tables.</p>	<pre>#parse ("apptmade")  #parse ("examlist") #parse ("preplet_{sitecode}_{formatname}") #parse ("pregwarn") #parse ("confirm") #parse ("examdesc") #parse ("signed_by") #parse ("sheet")</pre>
<p>To show the first name of the patient only, and NOT in block capitals.</p>	<pre>\$pm.capitalise(\$patient.forenames.replaceAll('\w+.*', '\$1'))</pre>
<p>Create specific text depending on what is in the examsperhospital table. For the example shown it will only print out the text if the XDEXA letter option is chosen in the examsperhospital table.</p>	<pre>#if (\$firstexam.examination == "XDEXA") ***Text here*** #end</pre>
<p>To show today's date.</p>	<pre>\$printManager.formatDateForPrint(\$todaysdate, "dd MMMM yyyy") \$pm.longdate(\$pm.addDays(\$todaysdate, 31))</pre>
<p>Ward specific text.</p>	<pre>#if (\$event.ward == "****ward code here****") ***Text here*** #end</pre>
<p>Show referrer speciality (Note speciality is misspelled...).</p>	<pre>\$pm.getRefObj(\$event.referrer).SpecialtyName +</pre>
<p>Change the format in which the referrer name is displayed from: "SMITH AB" to "AB Smith".</p>	<pre>#parse ("ref2")</pre>
<p>Mobility specific text.</p>	<pre>#if (\$event.mobility == "****code here****") ***Text here*** #end</pre>
<p>A script to make the Exam Summary only print if the user can print unverified reports.</p> <p>Create the following text as a script, then add it in the EXAM_SUMMARY as a page printable.</p>	<pre>Page = "let_appt_1_pg2" Try {   pm.loadPage(page); } catch (e) {   page = "letter_pg2"; } con = hss.cris3.Cris3Manager.getController(); pu = con.securitycheck("REPORT","PRINT_UNVER"); print.addVariable("print_verified", pu);</pre>



	<pre>print.usePages(page, page); print.addTemplate("letter", "examsum", "Monospaced", 10);</pre>
Condition to check against the waiting list urgency. This will print text if the urgency is not equal to 5.	<pre>#if (\$event.Urgency != 5) ***Text here*** #end</pre>
Show the clinical history of the event.	<pre>\$event.ClinicalHistory</pre>
Condition for variables based on multiple exams.	<pre>#if(\$firstexam.examination.matches("CVCOY CUCOY")) - This line is open Monday to Friday 9.30am to 4.30pm. #end</pre>
Condition for variables based on single or multiple rooms.	<pre>For a single room:  #if (\$firstexam.room == "ROOM1" #end  For multiple rooms:  #if (\$firstexam.room.matches("ROOM1 ROOM2 ROOM3 ROOM4 ROOM5 ROOM6 ROOM7 ROOM8 ROOM9")) #end</pre>
If the first exam department code matches MRICT then print this text, otherwise, print the standard signed by.	<pre>#if (\$firstexam.Dept.getField("code") == "MRICT") - This line is for signed by CRICT, custom text. #else #parse ("signed_by") #end</pre>
If the first exam status matches RJ and the patient has a hospital number, print the hospital number.	<pre>#if (\$firstexam.CurrentStatus.StatusCode.Code == "RJ") #if (\$patient.hospital_number &amp;&amp; \$patient.hospital_number.length() &gt; 0) Hosp No: \$patient.hospital_number #end #end</pre>
If the event site matches NT255 then print this text, otherwise, print this text.	<pre>#if (\$event.site == "NT255") An appointment has been made for \$you to attend the #parse("dept") at the Nuffield Cardiff and Vale Hospitals, #else An appointment has been made for \$you to attend the #parse("dept") at the Nuffield Health \${eventSite} Hospital,</pre>



	#end
Addition of an image.	<pre>\\IMAGE image.jpg 100pt centre image.jpg - This is the image name 100pt - Width of the image. This will scale vertically centre - If set this will center the image on the page</pre>
Print Vetting preparation info (from selected protocol).	<pre>\$event.VettingDetails.Preparation.replace("~", "")</pre>
Print Vetting booking notes (from selected protocol).	<pre>\$event.VettingDetails.BookingNotes.replace("~", "")</pre>
To print a piece of text based on a specific protocol selected, you would need to find out the protocol key first, we can then use this in the condition.	<pre>#if (\$event.VettingDetails.SelectedProtocols == "70001997") TEXT GOES HERE. #end</pre>
Use of Practitioner (Vetting) or Intended Clinician (Reporting) via formats.	<pre>#if (\$event.Practitioner == "TEST") #if (\$event.IntendedRadiologist == "TEST")</pre>
Additional info tab in patient details (county, race, primary language, marital status, religion, account number, citizenship).	<pre>\$pm.getNormal("CRISCNTY", \$patient.countyCode) \$pm.getNormal("CRISRACE", \$patient.race) \$pm.getNormal("CRISPLNG", \$patient.primaryLanguage) \$pm.getNormal("CRISMARI", \$patient.maritalStatus) \$pm.getNormal("CRISRELI", \$patient.religion) \$patient.accountNumber \$pm.getNormal("CRISCITI", \$patient.citizenship)</pre>