Basic noting scenario

NHS Connecting for Health is delivering the National Programme for Information Technology
NHS Connecting for Health is delivering the National Programme for Information Technology
### New consultation

Tick to confirm that this is what you mean:

- [ ] Referral

Type your notes here:

NHS Connecting for Health is delivering the National Programme for Information Technology
NHS Connecting for Health is delivering the National Programme for Information Technology
<table>
<thead>
<tr>
<th>New consultation</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tick to confirm that this is what you mean:</td>
<td>Type your notes here:</td>
</tr>
<tr>
<td>□ Referred by another GP</td>
<td>Referred by gp</td>
</tr>
<tr>
<td>□ Pain in finger</td>
<td>Pain in left index finger: Unable to grip properly</td>
</tr>
<tr>
<td>□ Left</td>
<td></td>
</tr>
<tr>
<td>□ Unable to grip</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

NHS Connecting for Health is delivering the National Programme for Information Technology
NHS Connecting for Health is delivering the National Programme for Information Technology
Tick to confirm that this is what you mean:

- Referred by another GP
- Pain in finger
  - Index finger
  - Left
- Unable to grip
  - Properly

Type your notes here:

- referred by gp
- Pain in left index finger. [Unable to grip properly]
Tick to confirm that this is what you mean:

- Referred by another GP
- Unable to grip

Type your notes here:

- Pain in left index finger. [Unable to grip properly]

Unable to grip (finding)

is a Finding relating to ability to grip

Browse related terms
NHS Connecting for Health is delivering the National Programme for Information Technology
Tick to confirm that this is what you mean:

- Referred by another GP

Type your notes here:

- Pain in left index finger
  - Unable to grip properly

Unable to grip
- Unable to release grip
- Unable to use palmer grip
- Unable to use tripod grip
- Unable to use scissor grip
- Unable to use pincer grip
- Unable to grip using supination of wrist
- Unable to grip using pronation of wrist
- Unable to grip using pronation of wrist

Browse related terms

NHS Connecting for Health is delivering the National Programme for Information Technology
Tick to confirm that this is what you mean:

- Referred by another GP
- Pain in finger
  - Index finger
  - Left
- Unable to grip

Unable to grip properly

Type your notes here:

referred by gp

Pain in left index finger

Unable to grip properly

OK  Cancel
Browsing for related concepts
NHS Connecting for Health is delivering the National Programme for Information Technology
NHS Connecting for Health is delivering the National Programme for Information Technology
NHS Connecting for Health is delivering the National Programme for Information Technology
NHS Connecting for Health is delivering the National Programme for Information Technology.
NHS Connecting for Health is delivering the National Programme for Information Technology

There must be no disconnect between the codes and the display text.
<table>
<thead>
<tr>
<th>New consultation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tick to confirm that this is what you mean:</td>
</tr>
<tr>
<td>Fracture of ulna</td>
</tr>
<tr>
<td>Type your notes here:</td>
</tr>
<tr>
<td>Fracture of ulna</td>
</tr>
</tbody>
</table>

NHS Connecting for Health is delivering the National Programme for Information Technology
Post-coordination
NHS Connecting for Health is delivering the National Programme for Information Technology.
Pain in left index finger

Tick to confirm that this is what you mean:

- Pain in finger
  - Index
  - Entire index finger
  - Index finger structure
  - Skin of index finger
  - Tendon of index finger
  - Phalane of index finger
  - Skin of part of index finger
  - Structure of phalanx of index finger
  - Head of phalanx of index finger

Type your notes here:

- Referred by gp
- Pain in left index finger
- Unable to grip properly

Index finger synonym or Index finger structure (body structure)

is a Finger structure

Browse related terms

NHS Connecting for Health is delivering the National Programme for Information Technology
NHS Connecting for Health is delivering the National Programme for Information Technology.
NHS Connecting for Health is delivering the National Programme for Information Technology
This could be more readable…!
New consultation

Tick to confirm that this is what you mean:

- [ ] Referred by another GP
- [x] Pain in finger
  - Distal phalanx of index finger
  - Left
- [ ] Unable to grip
  - Properly

Type your notes here:

referred by gp

Pain in finger side of Left Unable to grip properly

NHS Connecting for Health is delivering the National Programme for Information Technology
Working with headings & subsets
NHS Connecting for Health is delivering the National Programme for Information Technology

<table>
<thead>
<tr>
<th>New consultation</th>
<th>Type your notes here:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tick to confirm that this is what you mean:</td>
<td>referred by gp</td>
</tr>
<tr>
<td></td>
<td>Allergies  ▼</td>
</tr>
<tr>
<td></td>
<td>Allergy</td>
</tr>
<tr>
<td></td>
<td>House mite</td>
</tr>
<tr>
<td></td>
<td>Presenting complaint ▼</td>
</tr>
<tr>
<td></td>
<td>Abdominal pain</td>
</tr>
<tr>
<td></td>
<td>Vomiting</td>
</tr>
<tr>
<td></td>
<td>Diarrhoea</td>
</tr>
<tr>
<td>On examination ▼</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fever</td>
</tr>
<tr>
<td></td>
<td>No rash</td>
</tr>
</tbody>
</table>

Presenting complaint ▼
- abdom pain
- vomiting
- diarrhoea

On examination ▼
- Fever
- [no rash]
NHS Connecting for Health is delivering the National Programme for Information Technology
Significant modification
Tick to confirm that this is what you mean:

☐ No Carditis

Type your notes here:

No card

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NHS Connecting for Health is delivering the National Programme for Information Technology
Recognition of commonly-used shorthand
What does “No rash or vomiting” actually mean?
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NHS Connecting for Health is delivering the National Programme for Information Technology
Using archetypes
NHS Connecting for Health is delivering the National Programme for Information Technology
NHS Connecting for Health is delivering the National Programme for Information Technology
NHS Connecting for Health is delivering the National Programme for Information Technology.
Useful add-ons
NHS Connecting for Health is delivering the National Programme for Information Technology.

Hard to know if this is a good thing without real-life usage studies.
Word equivalence detection is a very useful add-on.
Disambiguation of commonly-used shorthand
| New consultation |
|------------------|------------------|
| Tick to confirm that this is what you mean: |
| Showing signs of nosocomophobia |
| Type your notes here: |

- **OK**
- **Cancel**
- **No match found**

Learn from real-life usage

NHS Connecting for Health is delivering the National Programme for Information Technology
Patient safety considerations
NHS Connecting for Health is delivering the National Programme for Information Technology
<table>
<thead>
<tr>
<th>Tick to confirm that this is what you mean:</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ Referred by another GP</td>
</tr>
<tr>
<td>☐ Cold</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type your notes here:</th>
</tr>
</thead>
<tbody>
<tr>
<td>referred by gp</td>
</tr>
<tr>
<td>Cold</td>
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</tbody>
</table>

NHS Connecting for Health is delivering the National Programme for Information Technology
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</thead>
<tbody>
<tr>
<td>Tick to confirm that this is what you mean:</td>
<td>Fracture of radius, side of Left</td>
</tr>
<tr>
<td>Fracture of radius</td>
<td>Fracture of radius, side of Left</td>
</tr>
<tr>
<td>Left</td>
<td></td>
</tr>
</tbody>
</table>

NHS Connecting for Health is delivering the National Programme for Information Technology
Search & matching capabilities

- Include key hierarchies
  - Clinical findings, procedures, observable entities & pharmaceutical / biological product
- Exclude concepts from other hierarchies unless chosen concept post-coordinates with them
- Use statistical word matching
  - Matches exceed a “similarity score threshold”
  - Exclude common words (eg. “from”, “to”)
- Recognise negation and qualifiers
Search & matching capabilities (contd.)

- Use SNOMED’s word equivalence matching tables
- Use prefix matching
- Use variable word order matching
- Parse for authorised structure
  - Qualification
  - Modification
  - Post-coordination
Use of SNOMED-CT - rationale

- Usability expert reviews
- Clinical subject-matter expert reviews
- User research (participants)
  - Online surveys 0
  - 1-on-1 usability interviews 45
  - Patient safety assessment 17
- Technical feasibility expert assessment
- Microsoft platform toolkit control
Conclusions

• It is possible to make SNOMED usable at the point of care
  – Useful
  – Effective
  – Satisfying

• CTP (Community Technology Preview) release version of SNOMED UI component in April
  – Contains much of the functionality shown here
  – For Microsoft-based software suppliers
Use of SNOMED-CT - summary

- Guidance being updated after patient safety assessments
- Technical feasibility assessments & service provision discussions ongoing
- Integration with clinical noting in progress from Oct-2007 > mid-2008
Summary Care Record

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NHS Connecting for Health is delivering the National Programme for Information Technology.

### Allergies and Adverse Reactions

<table>
<thead>
<tr>
<th>Allergic drug reaction</th>
<th>Reaction details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Penicillin</td>
<td>Allergic reaction</td>
</tr>
<tr>
<td>Aspirin</td>
<td>Blood clotting</td>
</tr>
</tbody>
</table>

### Medication

#### Repeat Medication
- Sildenafil 20mg tablets
- Simvastatin 20mg tablets
- Betamethasone valerate 0.1% cream 50g
- Salbutamol MDI Inhaler

#### Acute Medication
- Medication prescribed in the last 6 months

### General Practice Summary

- **Michalosia JOHNSTON-BURNETT**
  - DoB: 16-May-1972
  - Female
  - Awaiting 100 123 456 1000

#### Allergies and adverse reactions

<table>
<thead>
<tr>
<th>Date</th>
<th>Allergy</th>
<th>Certainty</th>
<th>Severity</th>
<th>Likelihood</th>
<th>Reaction type</th>
</tr>
</thead>
<tbody>
<tr>
<td>13-Jan-2007</td>
<td>Referred consent for upload to national shared electronic record</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14-Nov-2006</td>
<td>H10: drug allergy to AMOXICILLIN caps 250mg</td>
<td>Moderate</td>
<td></td>
<td>Likely</td>
<td>Allergy</td>
</tr>
</tbody>
</table>

#### Repeat medication

- **First prescribed**: 02-Mar-2006
- **Medication item**: 1% Hydrocortisone cream
- **Dosage instructions**: Use on affected areas twice a day

- **Date**: 12-Jan-2005
- **Medication item**: Atenolol 50mg tablets
- **Dosage instructions**: Take one daily

- **Date**: 30-Apr-2004
- **Medication item**: Bisoprolol 10mg
- **Dosage instructions**: Take one daily

#### Acute medication

- **Prescribed**
  - **Medication item**
  - **Dosage instructions**
  - **Quantity or duration**
  - **Reason**
### General Practice Summary

**Created 15-Mar-2007**

This is a GP Summary sourced from the patient's General Practice record. This summary may not include all the information pertinent to this patient. NB the patient may have opted to leave items from this summary. [Tell me more](#)

**Author:** The Bridge Street Practice, Bridge Town, Bridgshire, BT1 1BT, England.

#### Allergies and adverse reactions

<table>
<thead>
<tr>
<th>Date</th>
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<th>Severity</th>
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#### Repeat medication

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<th>Reason</th>
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<tr>
<td>02-Mar-2006</td>
<td>1% Hydrocortisone cream</td>
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<td></td>
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<tr>
<td>12-Jan-2005</td>
<td>atenolol 50mg 50mg tablets</td>
<td>take one daily</td>
<td></td>
<td>Ischaemic Heart disease</td>
</tr>
<tr>
<td>30-Apr-2004</td>
<td>lisinopril 10mg 10mg tablets</td>
<td>take one daily</td>
<td></td>
<td>Ischaemic Heart disease</td>
</tr>
</tbody>
</table>

#### Acuato medication

<table>
<thead>
<tr>
<th>Prescribed</th>
<th>Medication item</th>
<th>Dosage instructions</th>
<th>Quantity or duration</th>
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