SNOMED-CT coding in general practice – barriers and opportunities

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Study supported by: HealthConnect
Background

• GP is one of the cornerstones of health care system
• GP typically
  – Does not have enough critical mass to have dedicated coding support (as compared to hospitals)
  – Has rich mix of patients (as compared to specialists)
• Taking GP on board with implementation of SNOMED-CT as national standard is important
Objective

How will general practice cope with SNOMED-CT?

What are the opportunities and barriers in coding at the GP level?
Study design

• 10 metropolitan GP using VIP software
• Minimalistic training (10 minutes intro)
  – Typically GPs receive very little user training for any software they use
• Lickert scales and interview in 2 phases:
  – Collect opinion on coding in general
  – (do coding as part of daily routine)
  – Collect opinion on SNOMED-CT experience and its perceived utility in the practice
• Measuring speed of coding
  – 2 sets of problems
  – 3 runs
    • SNOMED-CT on VIP
    • SNOMED-CT on CliniClue
    • “Usual” coding on VIP (6/10 GPs use “Custom”, 4/10 ICPC)
“Entering a diagnostic code is useful for my practice”
“Entering a diagnostic code is difficult”
“Coding as such is important”
“Learning SNOMED-CT was easy”

- Strongly agree: 30
- Agree: 50
- Neither agree nor disagree: 10
- Disagree: 10
“I am able to use SNOMED-CT in my practice”
“SNOMED-CT is easy to use”

- Agree: 50
- Neither agree nor disagree: 30
- Disagree: 20
“SNOMED-CT is useful for my practice”
“I intend to use SNOMED-CT in future”

- Agree: 30
- Neither agree nor disagree: 20
- Strongly disagree: 50
## Speed of coding

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean [s]</th>
<th>Std.Dev [s]</th>
<th>Min [s]</th>
<th>Max [s]</th>
</tr>
</thead>
<tbody>
<tr>
<td>SNOMED-CT in VIP</td>
<td>79</td>
<td>38.1</td>
<td>26.6</td>
<td>7.6</td>
<td>158.3</td>
</tr>
<tr>
<td>“Usual” coding in VIP</td>
<td>80</td>
<td>22.0</td>
<td>19.8</td>
<td>4.9</td>
<td>143.0</td>
</tr>
<tr>
<td>SNOMED-CT in CliniClue</td>
<td>69</td>
<td>21.2</td>
<td>16.5</td>
<td>5.3</td>
<td>84.5</td>
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</tbody>
</table>
Barriers

• Lack of **time** (so far the time and effort spent on coding not outweighed by incentives)
• Lack of **incentives** (quality of care, q. of patient management, DSS... payment)
• Terminology is **too rich** (ambiguity, search time, deciding on level of detail...)
• Terminology is **too narrow** (missing codes – e.g. “testing for driving licence”...)
• Very few tools available to utilise the codes entered
What GPs expect?

- Services (DSS…) linked to codes
- Better quality of patient care (codes related to alerts, scenarios, care plans …)
- Summarising the consultation
- Comprehensive transfer of information, improved quality of referrals, continuity of care
- Better (or quicker) standardised overview of patient documentation (e.g. codes related to case records)
- Statistical overview on the case-mix of problems seen by the practice
Opportunities

• Provide incentives
  – Provide tools to make coding quicker and mentally easier
  – Attach additional services to codes
  – Provide tools to search for codes or groups of codes (statistics, quick identification of groups of patients)
  – Decision support systems (e.g. guidelines)
  – Code-specific templates
  – Financial reimbursement for time spent

• User interface to reflect GP workflow

• Synonyms (e.g. “sore thumb” → “thumb pain”)
Conclusion

• GPs can use SNOMED-CT without too many problems
• Time needed to code in SNOMED-CT does not differ too much from what is needed for coding in the system GPs currently use
• GPs see coding as important activity

BUT

• GPs are not ready to do coding on a routine basis without an additional incentive – mostly in form of improved care or care management
More detailed report on this study can be found on the HealthConnect site:

http://healthconnectsa.org.au/Portals/0/SNOMED-CT coding diagnosis in General Practice FINAL.pdf