Recorded vignettes: a novel method for investigating documentation in the Electronic Healthcare Record (EHR)

Background

360 million consultations documented annually in England

Accurate descriptors required for secondary data functions

• Computerised decision support
• Financial reimbursement
• Audit
• Disease prevalence monitoring and research

Coding is not explicitly taught within the GP curriculum

How do you research how clinicians document?

• Previous studies: use real patients/actors interacting with clinician studied
• Lack standardisation
• Expensive

Why Allergy?

• Growing clinical problem
• 2014 NICE guidelines: Poor clinical documentation is a major issue in allergy
• EHR can’t distinguish between intolerance and allergy
• Incorrect labelling of patients
• Adverse impact on patient care?
• Little known about coding practices in non-incentivised condition such as allergy

Method

A novel method developed to standardize research of EHR use

7 GPs and 15 GP trainees were recruited
All successfully completed

Data was returned from 4 different EHRs
SystmOne (6), EmisLV (2), EmisWeb (6) and Vision (8)

Screen prints effectively captured data with minor technical difficulties reported by 2 participants

The study took 1 - 2 hours to complete: longer than expected from the pilot study

Results

Questionnaires explored reasoning behind code assignment

Vignette 1
Vignette 2
Vignette 3
Vignette 4
Vignette 5
Vignette 6
Overall

55% 7.6 (5-9) 91%
44% 7.1 (2-10) 80%
41% 7.9 (5-10) 100%
41% 7.2 (4-10) 80%
68% 7.8 (7-10) 100%
68% 8.3 (7-10) 95%
53% 7.7 (1-10) 93%

Possible Sources of Confusion:
“Quality” medical, technical or acting?
“Does this vignette reflect real-life?”
Future Potential - Significant for all EHR stakeholders

Strengths

Reduce variables associated with this area of research
(e.g. history taking, communication skills & doctor-patient interactions)

Reproducible

Economical on a large scale

Different EHR providers can be researched

Simple: participants use their own EHR, in their own environment, at their convenience

Limitations

Refined monologues required for meaningful results

Photos must be high resolution

Participants require up-to-date software and degree of computer literacy

Discussion

Filmed vignettes are an inexpensive, rigorous technique for exploring how clinicians document

Viable method - Quantitative and qualitative feedback from 22 participants in allergy study

To reduce participants’ time - Fewer vignettes per study, refinements to the instruction process

Monologues specifically vague to reflect initial presentations: identified in participant feedback

Filmed 6 short vignettes (21-50 secs)

Monologue of common allergic presentations as if in consultation with a doctor

Digital photographs were included to replicate rashes

Electronic distribution of study files

Documented vignettes in their own EHR

Returned screen-prints to the researcher for analysis

- Codes, free text and EHR functions

Questionnaire

- Exploring decision-making and validation of method

Initially piloted on 1 GP and 2 trainees leading to refinements

References

3. 2014 NICE guidelines: Poor clinical documentation is a major issue in allergy

Impact on the interpretation of studies utilising CPRD data?

Use to plan and validate CPRD studies: identifying how clinicians document various presentations of the condition of interest to generate a likely range of codes

Future Potential - Significant for all EHR stakeholders

Professional training tool for GPs in documentation

Research training intervention

Eligibility for Free Text & EHR functions

Monologues specifically vague to reflect initial presentations: identified in participant feedback

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