

The Annotated Cost Questionnaire: An Attempt at Standardisation

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(Questionnaire available on HERU & DIRUM websites)

Outline of Session

- Background to Annotated Cost Questionnaire
- Working party aims
- General principles followed
- Overview of questionnaire chapters
- Empirical study to evaluate questionnaire
- Discussion



Background

The **Annotated Patient Cost Questionnaire** produced in response to interest showed to e-mail request (July 1998) from Ken Buckingham to HESG members. He asked for advice on whether a standard patient cost questionnaire was available for use in prospective health economic evaluations?

Working party set up meeting 4 times over 12 months & GlaxoSmithKline funded travel expenses to Birmingham.

Working party members

- Ken Buckingham, (Chair), Nicola Cooper, Wendy Coucill, Joe Eastman, Marilyn James, Elaine McColl, Panos Papanikolaou, Adam Parnaby, Sally Thompson, Sarah Wordsworth
- Others provided their questionnaires to help us.



Working Party Aims

- We sought to measure inputs into the health production function that relate directly to patients and informal caregivers for which patients may be used as a source of information.
- Produce a resource for investigators throughout the UK to develop questionnaires for administration to patients for the collection of health care costs.
 - Wanted a highly standardised questionnaire comprising a "menu" of questions from which researchers are able to choose those questions relevant to their particular economic evaluation.
- Reduce *ad hoc* approach to measuring patient costs and improve transferability of patient costs results across different studies.



General Principles Followed

- Questionnaire to be **generic** producing a range of questions to be used across various conditions (chronic & acute).
- Questions to be suitable for self-completion by patients, although recognised some may need assistance.
- Use 'sign-posting' to guide the respondents through questionnaire.
- Avoid using categories to record numerical data & keep variables continuous where possible.
- To ease use have simple yes/no options.
- Decision of recall period left to investigators. However, for maximum reliability recommended no more than 2 weeks if feasible.
- Didn't make recommendations about specific methods of valuation, e.g. productivity losses, researchers directed to selected literature on topic.



Questionnaire Chapters

- **Chapter 1:** Introduction & Questionnaire Aims, Guidance notes for users

- **Chapter 2:** Introducing a questionnaire

- **Chapter 3:** Single visits to health care facilities

(Patient travel costs, patient time costs, companion costs, childcare & other dependent costs)

- **Chapter 4:** Multiple visits to health care facilities

(Similar to above)

- **Chapter 5:** Domiciliary care costs

(Health & social care professional costs, care assistants, home help, meals-on-wheels, informal care, childcare, residential care)



- **Chapter 6**: Productivity losses due to illness (acute & chronic illness)
- **Chapter 7**: Medication & medical supplies
- Prescribed & unprescribed medications, devices & appliances
- **Chapter 8**: Private consultations
- **Chapter 9**: Additional information (Other costs & sociodemographics)



Empirical study with dialysis patients

- August 2001, Sally Thompson & I performed empirical work to test how well the questionnaire performed in practice.
- Dialysis patients:
 - chronic renal disease, lots of use of resources;
 - familiar treatment area;
 - little information on costs to patients
- 108 patients (83 hospital dialysis, 25 at home).



Cost Categories Included for dialysis patients (& companions)

Cost category

Questions

Travel costs

Mode of transport to and from the dialysis unit / clinic

- Distance travelled (one-way)
- Other travel costs incurred by patients such as parking fees

Time costs

- Time spent receiving dialysis therapy (treatment time as well as any time taken from usual activities, such as work and leisure) and travel times

Other health care facility costs

- Other than the dialysis unit, and any out-of-pocket expenses incurred as a consequence of their dialysis therapy, such as reading materials and special clothing

Questionnaire Evaluation Issues

- What was examined?

1. Ease of producing a derived questionnaire from main questionnaire (Very easy)
2. Tests of internal consistency - length of treatment time & travel mileage (Good)
3. Were relevant costs included in the questionnaire? (Yes, though companion costs could go)
4. Ease of completion for patients (Easy or very easy)
5. Ease of analysis for researchers (Easy as few open ended questions)
6. Test-retest reliability - sample of 10 patients given questionnaire again 2 weeks after completing it initially (Answers consistent)



Discussion

- Achieved aim of producing a menu of questions for different contexts.
- Was a standardised questionnaire produced?
- More empirical work would have been useful (different contexts, recall periods etc).
- Little focus on clinical trial context.
- Not much guidance on valuation, especially productivity.
- A lot of interest and use of questionnaire initially.

