Reviewer's report

Title: Characteristics of national registries for occupational diseases: international development and validation of an audit tool (ODIT)

Version: 1 Date: 3 July 2009

Reviewer: Kristina Kjaerheim

Reviewer's report:

Characteristics of national registries for occupational diseases: international development and validation of an audit tool (ODIT)

Reviewer's report

Kristina Kjaerheim, cancer Registry of Norway

I have no major of minor compulsory/essential revisions.

Comments regarding discretionary revisions

To create a registry of occupational diseases is a difficult task, and all efforts to make such registries comparable between countries and useful tools for preventive work should be welcomed. At present, most countries do not have more than a ‘causes-of-death’ registry and possibly a cancer registry. Existing registries of occupational diseases suffer from great underreporting and are highly dependent on the national compensation system. Characteristic of occupational diseases is that they require not only a diagnosis of the medical condition but also an assessment of the occupational exposure(s) and an evaluation of the causal relationship. The multitude of exposures and outcomes, and the overlap between occupational and non-occupational disease entities makes the process of establishing and quality assurance of registration very complex.

The present paper describes an effort to develop a tool for the evaluation of occupational disease registries. Ten indicators of quality and several quality criteria for each indicator were identified through a literature search and evaluated through a so called ‘Delphi study’ involving experts from selected EU countries. This process is well described in the manuscript, and results in what the authors themselves call a ‘framework’ and a ‘starting point’ for the quality improvement of occupational disease registries. Such terms are very adequately used here, since a number of questions and problems still remain and must be solved to fill this ‘framework’ with substantial content before a valid registry can be expected to appear. These limitations of the ODIT tool are for the most part discussed in the last section of the paper. Such questions/problems are listed below.

Re: The completeness of notification form.

Coding and classification. Medical diagnosis should be coded according to the
ICD-10 classification. Most physicians will be trained in this. Type of exposure, however, also needs a coding system; this reviewer is not familiar with the EU short list, and no reference is given. For occupation and industry there are international coding systems, but none are referred to. Assessment of the probability of the causal relation is also a major difficult task, where little consensus exists. Lastly, it is not stated whether coding should be done locally or centrally, in each case training and validation in necessary.

Re: Coverage of registration.

It is not stated who the ‘notifying physicians’ are meant to be. Is it all physicians, or is it occupational health physicians? Are they self-selected, or should they be appointed?

Re: Guidelines of criteria for notification. It is not clear to this reviewer whether guidelines for assessment of occupational diseases actually are available at present or whether they must be established. If they are already constructed, reference(s) should be given.

Re: Education and training. This would have to be similar across countries.

Re: Completeness of registration. The requirement for participation is set to 75% of notifying physicians who covers 75% of working population. It is not clear how this should be assessed, and it is not convincing that this would actually be a good measure of completeness. It seems that one physician notifying 1% of occupational diseases in his/her population would add as much to the validity of the registry as one notifying physician reporting 98% of the relevant diseases.

Re: Investigation of special cases. This appears to require occupational health clinics, but also raises the question of type of notification: Are individual names and other personal identifiers registered, or is the basis for reporting anonymous? If registration is bases on personal identification, consent is needed, which brings in a new dimension to be considered in the question of validity.

Re: Presentation of monitor information. Incidence rates for occupational diseases are difficult to evaluate without incidence rates for the disease entity as such (without considering etiology). It is also very questionable whether employment statistics are good enough to calculate incidence rates in the working population, and even by occupation/industry.

One major question not considered in the paper is the calculation of the total quality score. If one (or more) of the individual items are more fundamental and perhaps even a prerequisite for the validity of the registry, a simple summary of scores should not be calculated. I believe this is crucial, and some comment on this should be included in the discussion.

The research question is well defined.

Methods are generally appropriately described, although some more information on the Delphi method could be interesting, and also a comment on the somewhat small sample size.

The reporting is clear and concise, the discussion is well balanced, and the
relatively modest conclusion is well in accordance with this. Title and abstract is in congruence with content, and the writing is good.

**Level of interest:** An article whose findings are important to those with closely related research interests

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.

**Declaration of competing interests:**

I declare that I have no competing interests' below.