



Editorial Comment

Comment on “The implementation of guidelines and computerised forms improves the completeness of cancer pathology reporting. The CROPS project: a randomised controlled trial in pathology” by Branston and colleagues

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In spite of what many clinicians appear to believe, there is more to the pathology report than the diagnosis and the informational details pertaining to the actual case. From the humble piece of pathologist's prose, parameters of possible prognostic value can—and should—be extracted, stored in a database, combined with other clinical and demographic parameters and analysed with respect to importance, thereby making it possible to improve stratification of patients in clinical trials and finally help to develop new treatment strategies. This process has been taking place for many years within disease-specific study groups, but considering its importance it is surprising that it has not been studied as extensively as, for instance, the significance of axillary node involvement in breast cancer—especially in consideration of the current emphasis on evidence-based therapy.

The article by Branston and co-workers clearly demonstrates that the use of pathology forms (or ‘proformas’) improves the quality of data collection. The strength of their work lies in the randomised study design. Regrettably, they were not able to evaluate the separate effects of education, paper forms and computerised (online) forms. However, it is clear from other, albeit non-randomised studies that paper forms improve reporting within breast and colorectal cancer [1–3], while information with written guidelines alone appears to be insufficient [1,4]—not surprising, given both the frailty of the human mind and the increasing number of observations required in pathology reports. Well-designed forms act as aide-mémoires or checklists. Since almost all pathological departments now use computerised reporting, the use of online forms has the additional advantage of obviating the need to dig out the relevant paper form and finding a ballpoint pen that

works, factors that will tend to enhance compliance and reduce costs. Moreover, the removal of a step in the data processing (paper form to database) further reduces the possibility of errors [5].

It is very encouraging that Branston and colleagues report such a wide acceptance of the new procedures among the parties involved. Rigby and colleagues also found that forms actually increase the dialogue between clinicians and pathologists [3]. Thus, there seems to be no psychological barrier against the introduction of online forms in cancer reporting. This being said, a few words of caution must still be added. The possibility of entering data directly into the computer should not become an excuse for indiscriminate registration of more or less relevant or ill-defined parameters. Pathology remains a subjective discipline, a fact that is reflected in the high inter-observer variation of some diagnostic entities or features, and not everything can be compressed into a form. The danger lies in that clinicians and data analysts may believe just this. Forms must be kept simple and advice/definitions must be readily available online, while information about goals and strategy should probably be periodically repeated in order to keep motivation high. There must be a good scientific reason for the inclusion of each individual parameter, and ideally each one should be evaluated as to its inter-observer variation; poor reproducibility will undermine the subsequent statistical analysis. Free text fields must be included to allow for unusual cases or new observations. All involved parties should be consulted in the design phase, as well as in subsequent changes and re-designs. The key word is user-friendliness; if this is absent, compliance will be affected and, with it, data quality.

Online forms are bound to become standard in the future but, as the Welsh team found out, there are still

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technical obstacles to overcome, especially within the software interfaces between the different databases. These problems should not be insurmountable. With the evidence now available, it is the responsibility of the various disease-oriented groups and cancer registries to persuade hospital and health administrators to secure sufficient financial means to develop effective solutions, to the ultimate benefit of the patients.

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