Data collection and quality issues in relation to cancer staging and treatments for the Irish National Cancer Registry. Can information and communication technology access improve data capture?

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Abstract.

The National Cancer Registry is responsible for collecting information on all cancers that occur in the Irish population. This information is used to produce figures on cancer incidence, prevalence and mortality. It was identified that in comparison to some of the United Kingdom cancer registries, in areas such as breast cancer hormone treatment and clinical rectal cancer staging, potentially not all information was being captured by the Irish cancer registry.

The research question was whether tumour registration officers employed by the National Cancer Registry captured more treatment if they had access to information and communication technology systems in hospitals, in comparison to those relying on paper records.

A literature review was performed assessing cancer registry performances in general, and in the context of breast hormone treatment capture and clinical staging for rectal cancers.

A quantitative research approach was used with purposeful sampling using a questionnaire for tumour registration officers in their base hospitals. In addition, oncology consultants in a private hospital were also furnished with a questionnaire, to assess breast hormone prescribing in the private hospital setting.

The questionnaires were then analysed to assess for statistical significance between hospitals with information and communication technology systems and those that had none or limited resources. Figures were obtained from the National Cancer Registry for both breast and rectal cancer patients in 2012. For both breast hormone treatment capture and clinical staging, tumour registration officers in hospitals with information and communication technology witnessed mainly higher capture rates. In the case of hormone capture it was identified that two sources of information and communication technology sources were more beneficial than one source. For rectal cancer clinical staging it was observed that access to any one system was better than none.

It would be recommended that where possible all information and communication technology sources should be accessed by the National Cancer Registry. In addition, following the literature review and questionnaire analysis, provision should be made on the cancer database for recording hormone treatment that was refused, and when clinical staging was not performed. This would reflect more accurately on the National Cancer Registry, as it would show that in a certain percentage of cases that information was not lost, but rather the intervention had not been made. Overall, the research question was answered and the hypothesis that ICT access enhances data collection and quality confirmed.