Methodology

Data Collection

STAG has a team of Local Audit Coordinators (LACs) who are employed by the participating boards to identify patients, collect data and feedback results to their local sites.

Data are recorded prospectively by clinical and administrative staff as part of the patient's routine care and are collected retrospectively by the STAG LACs. Data sources include patient's case notes, patient administration system and results of diagnostic imaging and surgical procedures.

Anonymised paper proforma are submitted to STAG central office at ISD for processing and conversion to electronic form by a third party contractor, who use dual data entry to ensure accuracy.

Eligibility

All patients who attend participating STAG EDs are reviewed to determine the following criteria for inclusion:

- all patients aged >13 years and
- who have sustained injury requiring an inpatient stay of at least three days or
- who die during their inpatient episode or
- are transferred to another STAG hospital or regional centre (see location map)
- patients are followed for 30 days or until death or discharge

Probability of Survival

STAG uses PS12 to determine probability of survival for each patient. This is a population based statistic which uses physiological derangement and injury severity to determine whether a patient would normally be expected to survive.

Abbreviated Injury Scale (AIS) and Injury Severity Score (ISS) are used to code and score individual injuries and score overall severity of injuries. ISS is combined with Glasgow Coma Scale (GCS) and adjusted for age and gender to give a resultant probability of survival for that patient.

The aggregation of all eligible trauma patients within a hospital gives a W-statistic for that hospital stated in terms of excess survivors per 100 trauma patients, relative to the reference database.

Quality assurance

All data are subject to a computer based validation process – queries are raised and LACs provide confirmation on correction to the query. In addition a random sample of cases is selected at each site to ensure coding accuracy (ie that injury description matches electronic/paper record and injury description matches the AIS code allocated). Data collection processes are quality assured by regional coordinators during sites visits, this includes assessment of individual site's case ascertainment rate.