

Fig. 3. Form-based interface of an acquisition integrator.

ferred or transported patient (accepting physician), the advice from the accepting physicians, and other information. Similar to a chart summary, an RIF can also be represented by a hierarchy. The RIF or chart summary can be basic units for sharing or exchanging among affiliated hospitals.

Transformation of an RIF into XML

An RIF hierarchy can then be transformed into a corresponding XML-based document. The transformation can be performed starting from the root of the hierarchy, and recording all its children structures in first-order depth, in which, for a structure, its children are visited before visiting its siblings. For each structure, there is one and only one entry point and leaving point when visiting the hierarchy. The entry point corresponds to a starting tag, and the leaving point to an

ending tag. The root is transformed to a starting tag corresponding to the entry of the document. Through the hierarchical representation, medical records or RIFs can be transformed into the corresponding XML-based ones.

RESULTS

By representing RIFs (or chart summaries) using XML, and exploring the web technique, we developed a web-based referral information system in which a referral's chart summary or RIF can be shared or exchanged over the Internet. The details of the system are described as follows.

System Description

In the system, each affiliated hospital must have a