

Management of Patients with Inherited Bleeding Disorders in the Emergency Department

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Background: Treatment of patients with inherited bleeding disorders in the emergency department (ED) is a challenge because hemorrhagic risk can be underestimated and the management is not well known by emergency physicians. At present, there are only guidelines from the National Haemophilia Foundation limited to haemophiliacs and rarely applied in our ED. In 2008, the EHAD recommended development of a policy to manage these patients.

Methods: The Emilia-Romagna Region (RER) started a project involving all 8 haemophilia centres (HC) and all 44 ED of the region. The project is based on:
 ✓ guidelines for emergency treatment,
 ✓ education for ED nursing, medical staff and patients
 ✓ a dedicated web-based software supporting treatment decisions, sharing data with the patients' electronic clinical records.

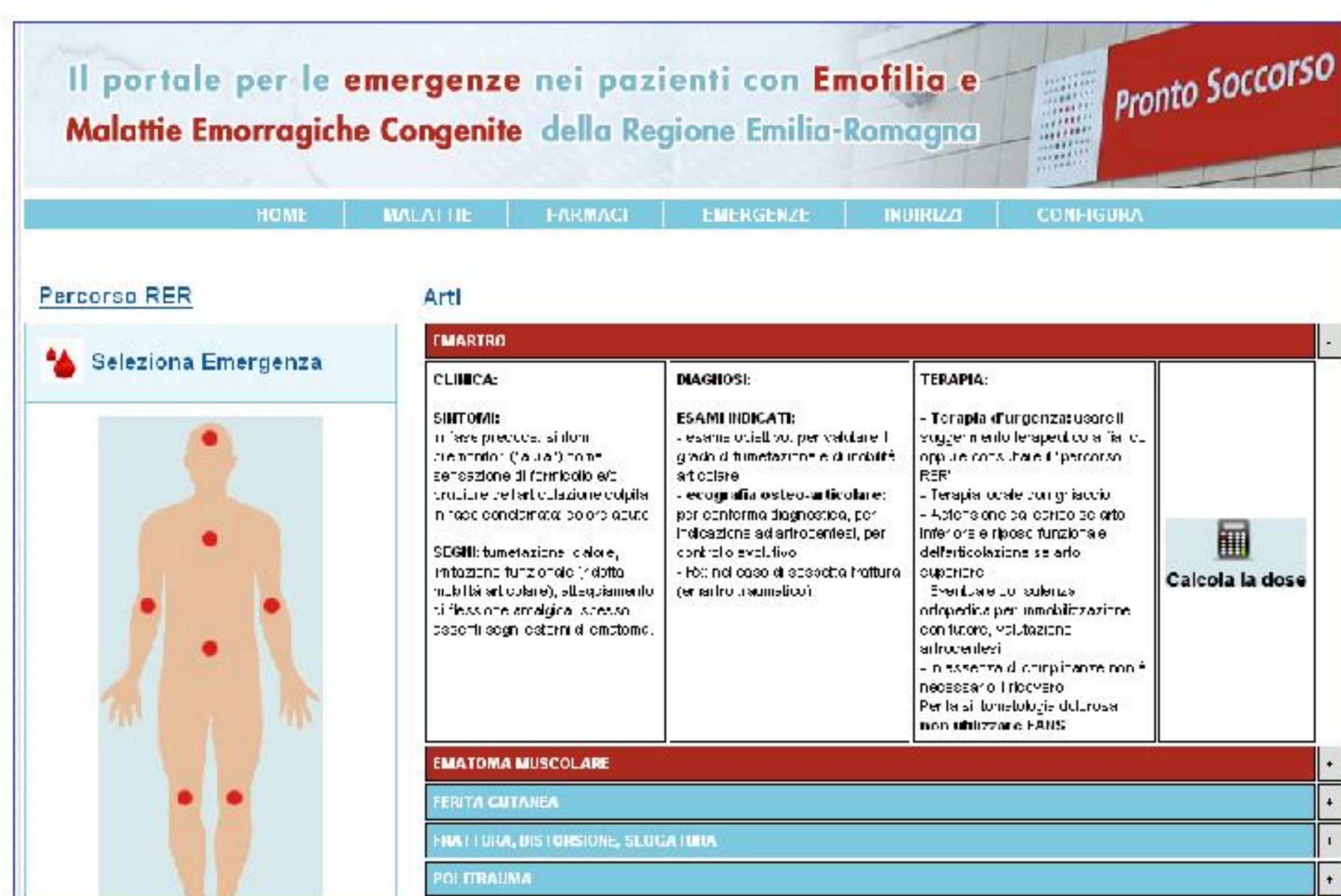
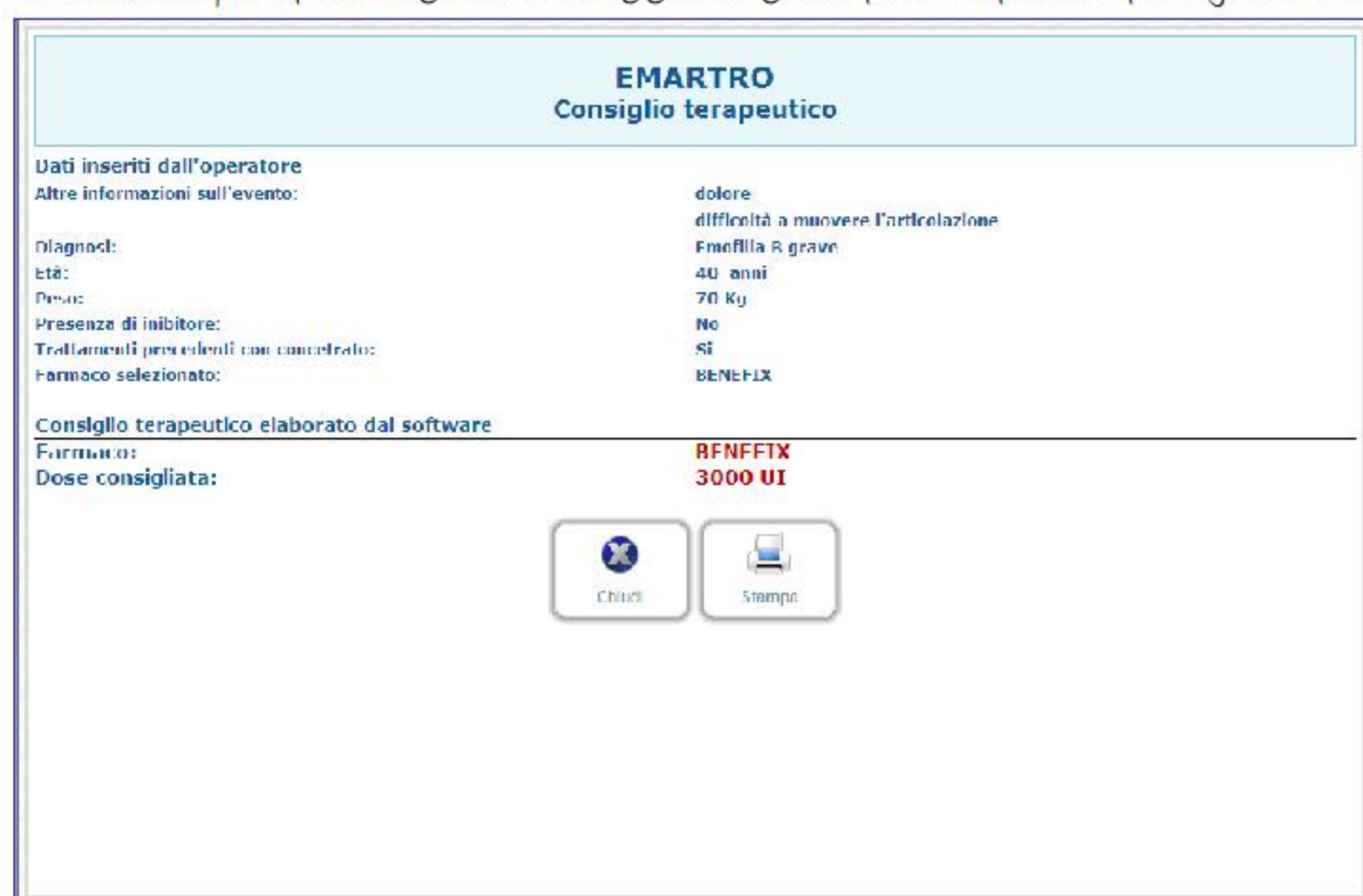


Fig. 1: An example of the algorithm suggesting the first infusion for a joint bleed



A patient's main data



Fig 2: An example of data collected in a patient's web-based clinical record

Results: Regional guidelines for emergency treatment, containing practical instructions for managing patients in the ED, were produced and shared by HC and ED staff. The web-based site, which has a private area for doctors and a simplified public area, enables easy access to descriptions of diseases and instructions for treating bleeds or critical injuries. A specific algorithm suggests the first dose of concentrates for every type and severity of bleed and trauma (figure 1). Furthermore, all RER patients with bleeding disorders have an electronic USB-key by which they can access their own main clinical and therapeutic data, stored in the region's web-based clinical records (figure 2). These data can be processed immediately by the ED web-based site providing optimal, tailored emergency treatment. The first training-course for ED doctors and nurses started in May 2010. The website www.emofiliarer.it have been active since February 2011 and after site training courses in each ED the network works in the Region since June 2011

Discussion: To our knowledge this is the first example of a network, involving HC, ED and patients, for managing bleeding emergencies in these patients with the support of dedicated web-based software.

