Programmability of an Anesthesia Information Management System

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For the OR's in our university hospital we have developed a home grown AIMS that consists of a web-based modular system. An AIMS, in our opinion, can be seen as a number of loosely coupled components: a GUI, forms, typesetting (anesthesia record), storage (database), the recorder that talks to the hardware and import and export modules that talk to the HIS, LIS etc. All components working together represent an AIMS 'suite'. In the ideal situation such a system should be open, not only to allow data to be processed, but also for supplementing and modifying components itself. This is fascilitated by using open standards where possible and setting up an open architecture. Still a lot of data extraction and extensions require programming skills. This is usually non-trivial and requires the investment of a substantial amount of time and expertise.
Is it feasible to move a step ahead and look beyond traditional programming languages, make programming easier and maybe even support non-programmers to contribute to the AIMS system? This will also be a good way to test and improve the openness of the architecture and interfaces.

The presentation will show a setup of how to create support for programming in an open environment.