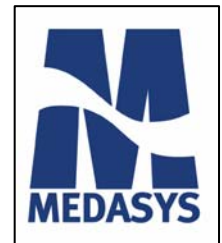


A clinical decision support system for order entry integrated to the information system of HEGP

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Objective



To conceive a generic CDSS,
for all types of orders and prescriptions,
reaching perceived users needs
and efficient in modifying their practices

Justification of the research topic

- **Development of Health Information Systems**
 - EHR, radiology and laboratory information subsystems, CPOE
 - next step: CDSS
- **Improving clinical practices**
 - for example, necessity to decrease the number of redundant orders for laboratory tests and the frequency of adverse drugs effects
- **Intervention achieving changes**
 - for example, reminders at the point of care

Research question



Could a generic CDSS
be accepted by users
and routinely effective to improve
the quality of care ?

Research methodology

- Systematic review
 - of CDSS evaluations
 - to determine technical characteristics contributing to success
- Development of several decision supports
 - according to users needs
 - in several field (drug, biology, imagery)
- Evaluation of the interventions
 - evaluation criteria
obtained by CDSS execution traces and EHR database querying
 - interrupted time series of the evaluation criteria

Research results to date

- **Systematic review**
 - system-initiated interventions
 - assistance without user control of the output
 - systems where data are automatically retrieved from EHR
 - and systems providing corollary actions in CPOE
- **Development of several decision supports**
 - to help clinicians to adapt the posology of nephrotoxic drugs for patients with renal insufficiency
 - to help clinicians to adapt the posology of anticoagulant drugs according to biological results (INR)
 - to avoid viral serology test redundancy
 - to help the planification of imagery exem (myocardial scintigraphy) by transmitting good informations to the imagery services

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 - to help clinicians to adapt the posology of nephrotoxic drugs for patients with renal insufficiency No effect
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 - to help the planification of imagery exem (myocardial scintigraphy) by transmitting good informations to the imagery services Effect