



Dipartimento Integrato Interistituzionale



Primo Workshop

Clinical Research and Innovation

Venerdì 4 luglio 2014 9.00 - 19.00 Aula Magna - Polo Fibonacci - Largo Pontecorvo 3, Pisa

Novel App-lications in critical care: new concept, new perspective

Fabio Guarracino





Department of Anaesthesia and Critical Care Medicine
Cardiothoracic Anaesthesia and Intensive Care Medicine
Azienda Ospedaliero Universitaria Pisana, Italy





About App

App: application software

SYSTEM SOFTWARE		APPLICATION SOFTWARE
Enable the computer to function	Usage	Enable user to work efficiently with documentation
COMPULSORY	Need	OPTIONAL-depends on usage and needs
Each computer need one system system software	Number Software	Each computer can have more than one application
Independent – can use without application software	Dependency	Dependent – application software cannot work without Application software
Provide environment in which the application run	Function	Provides the environment to enable user to accomplish specific task



- A mobile app is designed to run on mobile devices
- Mobile apps were originally offered for general information retrieval, including email, contacts, stock market and weather information
- Rapid expansion into other categories, such as mobile games, locationbased services, banking, order-tracking, ticket purchases, ...
- Recently mobile medical apps have been developed





Why App in critical care?

- Urgency/emergency setting
- Time constraint





Risk management, resource utilization!!

App for critical care

- Transthoracic echocardiography reporting
- Transoesophageal echocardiography reporting
- Left ventricle elastances calculator
- Consultancy request and reporting
- CPAP O2 / Air flow
- ICU bed management











App in critical care setting

The User Interface of mobile apps in critical care should consider users' limited time, unique environment (ICU, ED, OR), minimize keystrokes, and be task-oriented with a minimum set of functions.







App in critical care: feed-back from the real world

- Quick and oriented fill-in
- Technical knowledge at hand
- Automatic production of PDF document (report, request, ...)
- Immediate delivery by email to patient, GP, other specialists
- Immediate visualization of available resources
- No printing

