Clinical Engineering in France

State and trends for the future

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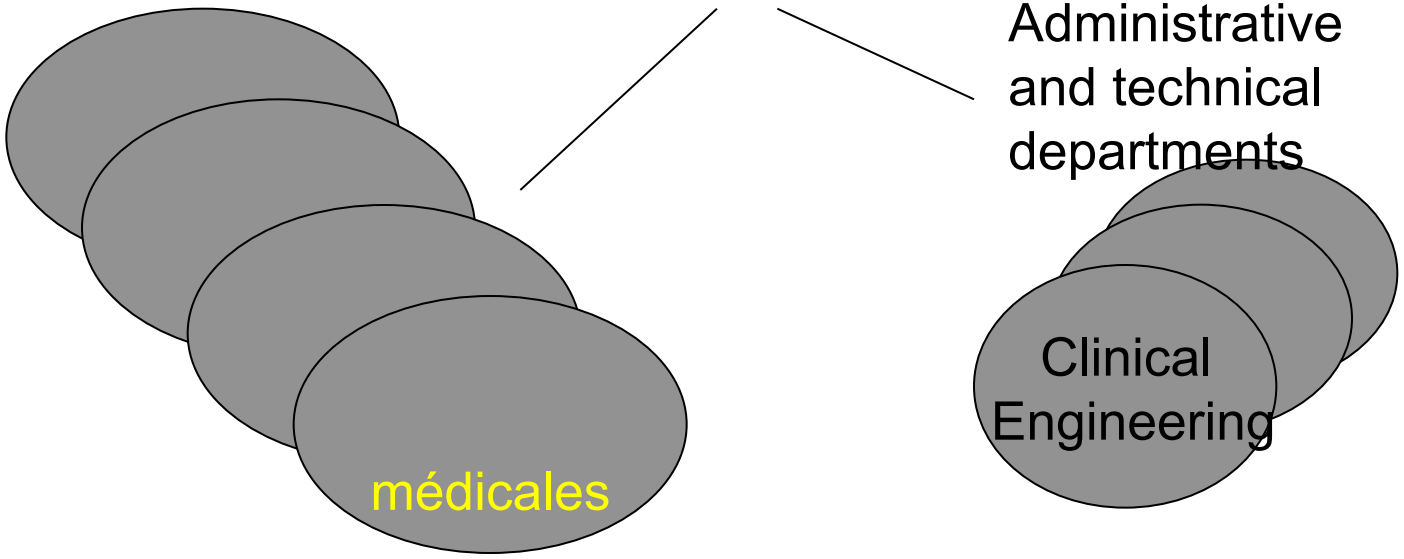
French Clinical Engineers Association

(2007)

Medical technologies

Competition

Executive board



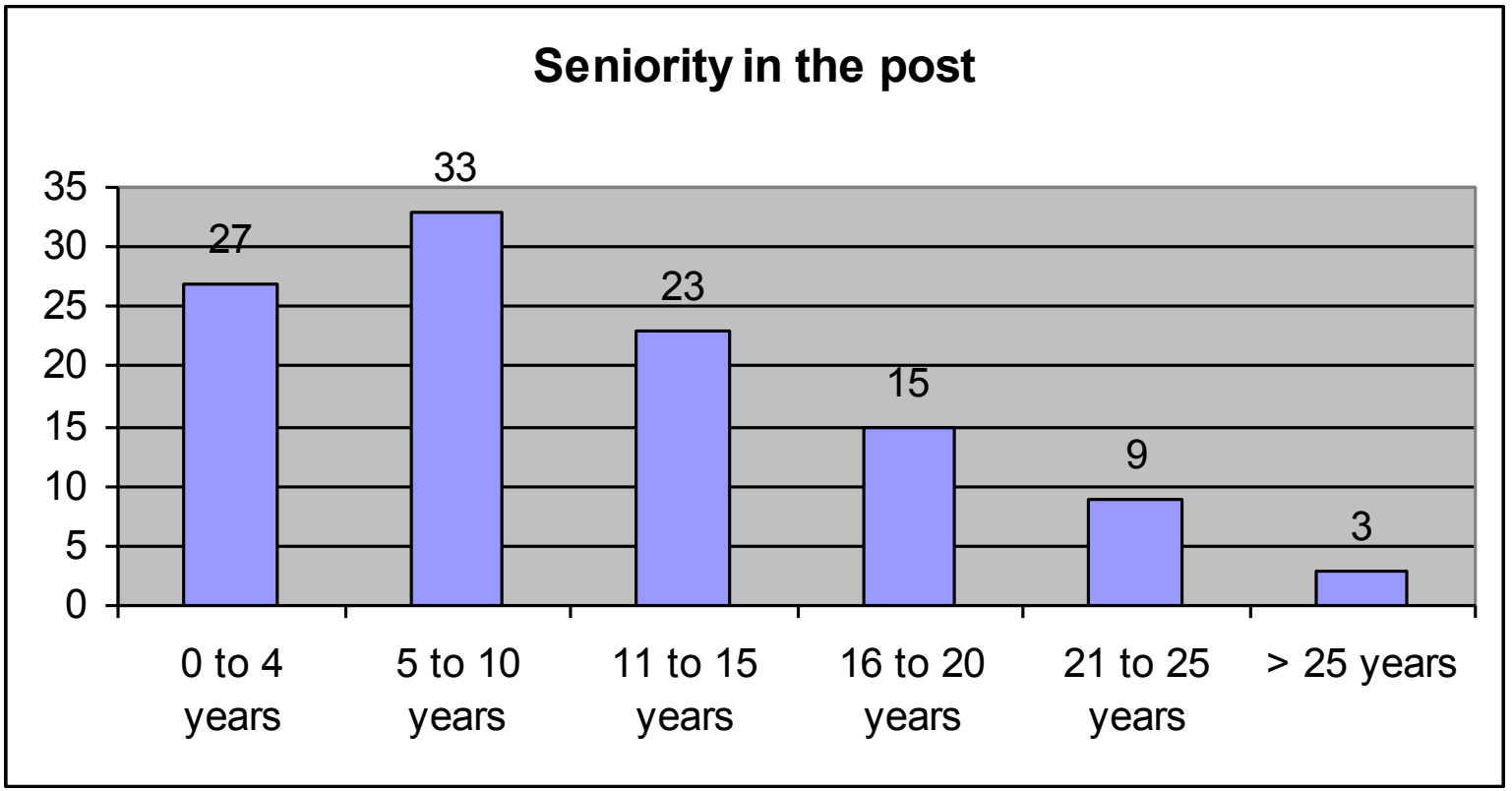
financing

Reforming hospital governance

investment

Clinical Engineer Survey - 2006

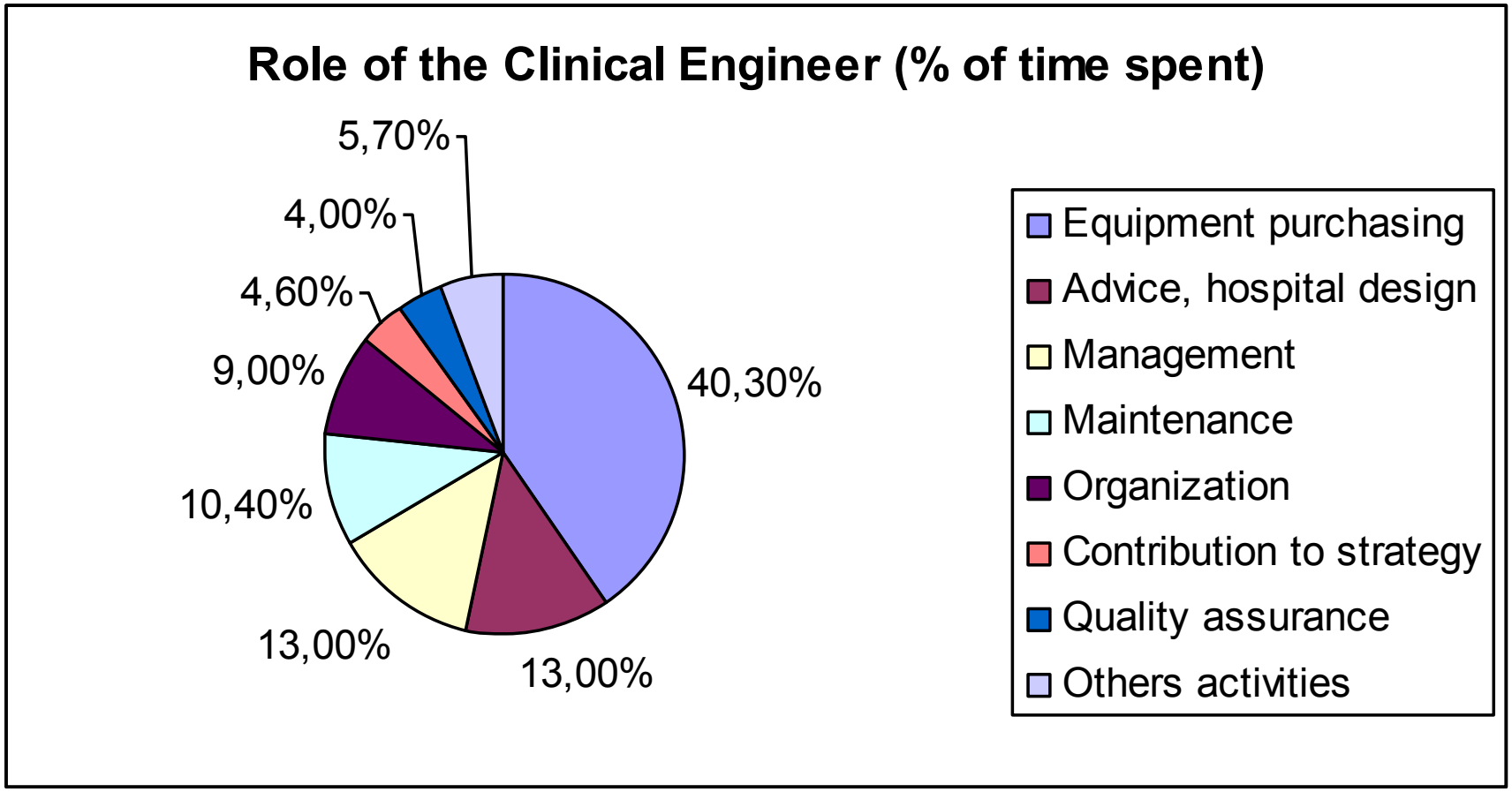
French « Baccalaureat » + 5 or 6 year higher education
30% women



Clinical Engineering

- To manage medical equipement, from planning to scrapping
  - Advise and contribute to hospital design
  - Purchase new equipment
    - *Plan and purchase*
    - *Specify implementation requirements*
    - *Verify and check newly delivered equipement*
  - Manage the maintenance
  - Manage replacement and scrapping

Clinical Engineers, Role and Activities



- The Clinical engineer
  - The Clinical engineer

– serves the entire hospital interest

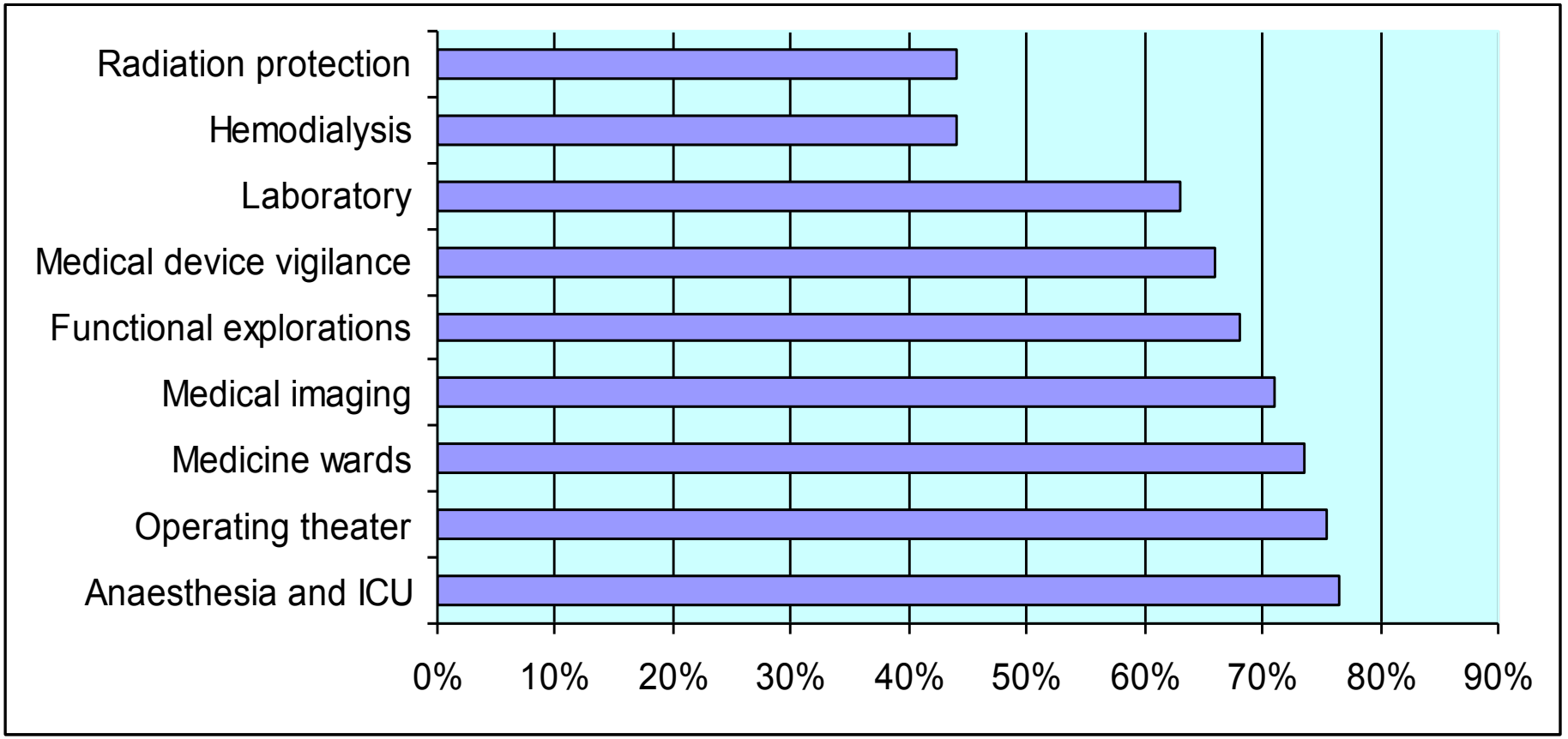
– suggests organizational changes to increase efficiency of medical equipment use

– helps hospital to adress issues such as :

- *Which technical resources are necessary to achieve the needed performance?*
- *Which equipment is the most appropriate for a given medical need?*
- *What is the appropriate maintenance plan to assure safety and availability we want to?*

The Clinical Engineers' Field

(% of answers)



Clinical Engineering Department

- Staff (mean) :
  - 2 engineers,
  - 7 technicians,
  - 1 clerk
- 1 engineer for 3,35 technicians
- 1 engineer for 342 acute beds

Trends : Healthcare Technology

- Molecular medicine
- Genetics
- Nanotechnologies

- Less invasive
- Remote monitoring
-
- Personnalized

Trends : Hospital and Society

- From one day to long stay care
- Shortage of qualified health professionnals

- *Healthcare networks : human & technical ressources*

- Control healthcare expenses

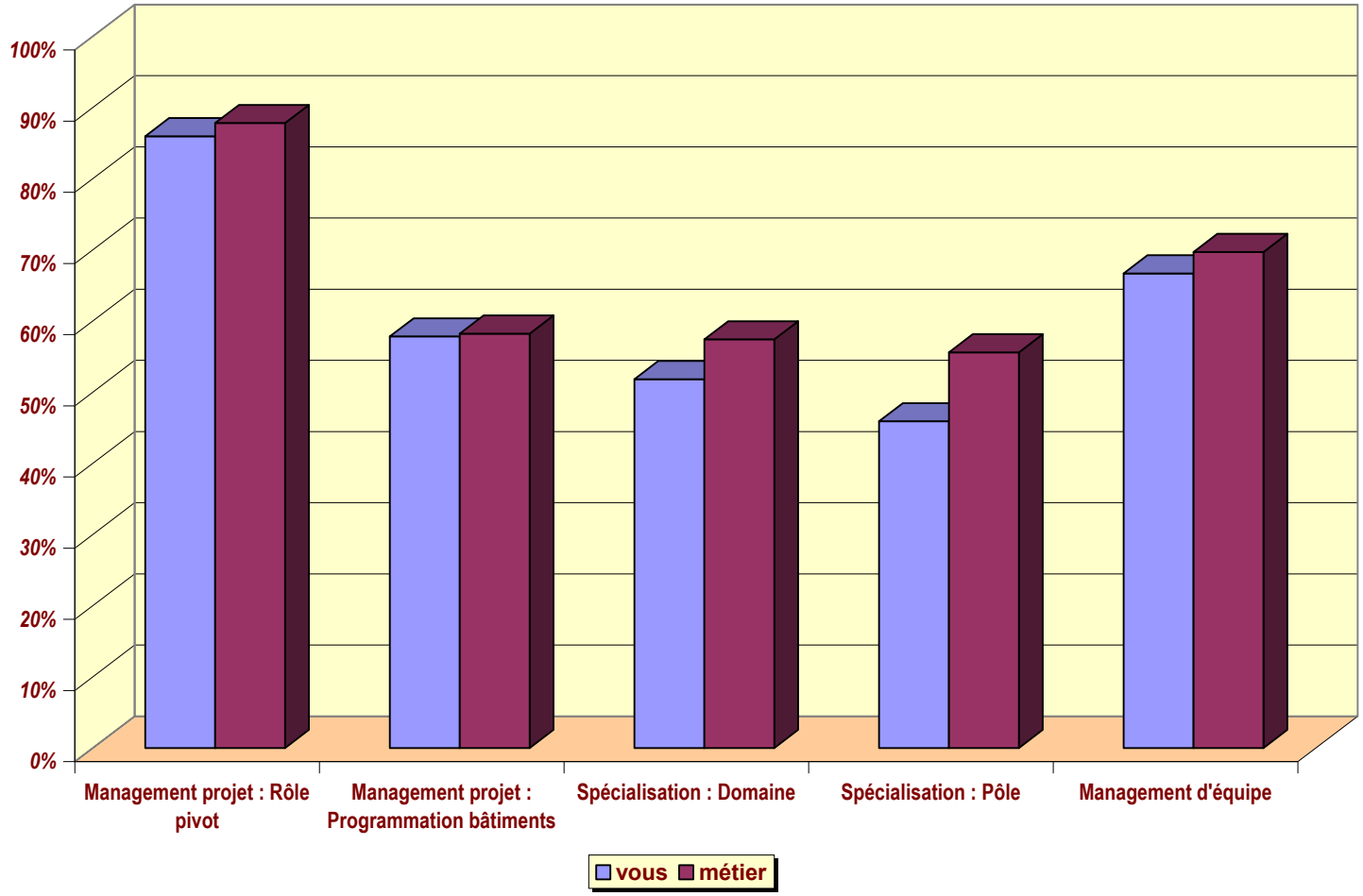
as shown by our 2010 study

technological issues

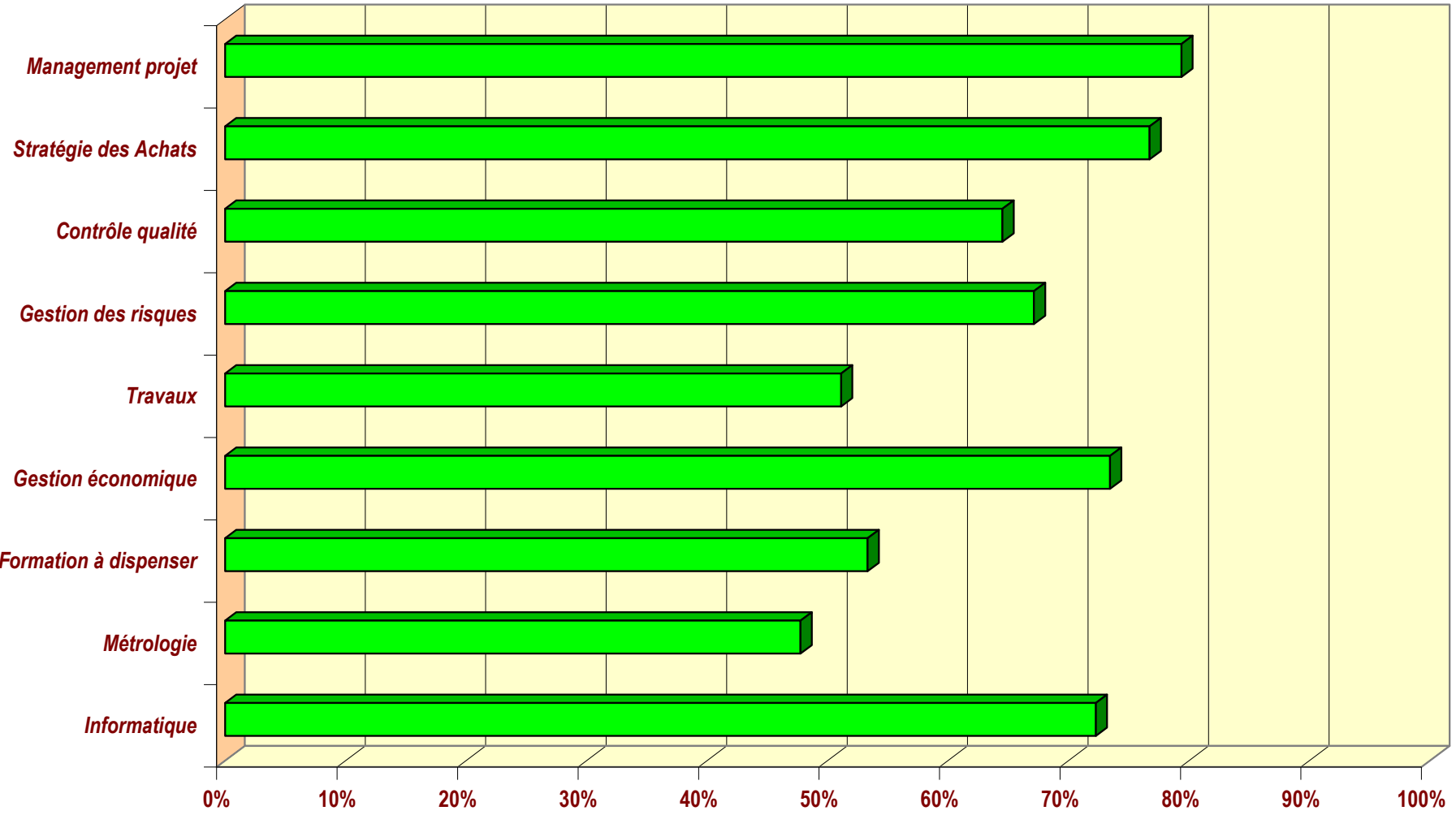
- Develop integration of medical technology : technical and human issues
- Take into account economic issues and ROI
- Develop monitoring of technological development, experience sharing and networking, at a regional, national and international level.

Impossible d'afficher l'image. Votre ordinateur manque peut-être de mémoire pour ouvrir l'image ou l'image est endommagée. Redémarrez l'ordinateur, puis ouvrez à nouveau le fichier. Si le x rouge est toujours affiché, vous devrez peut-être supprimer l'image avant de la réinsérer.

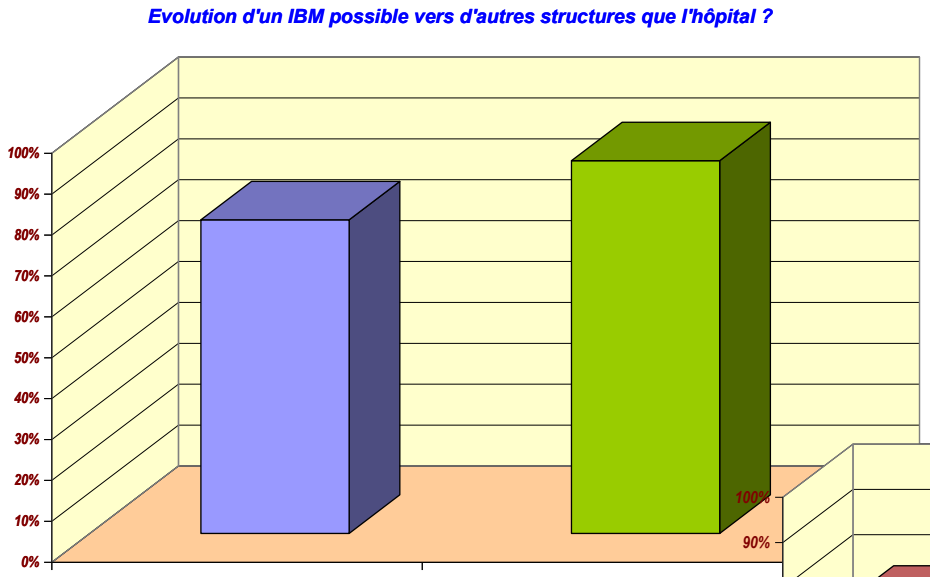
Quels sont les axes d'évolution les plus intéressants, pour chaque IBM / pour le métier ?

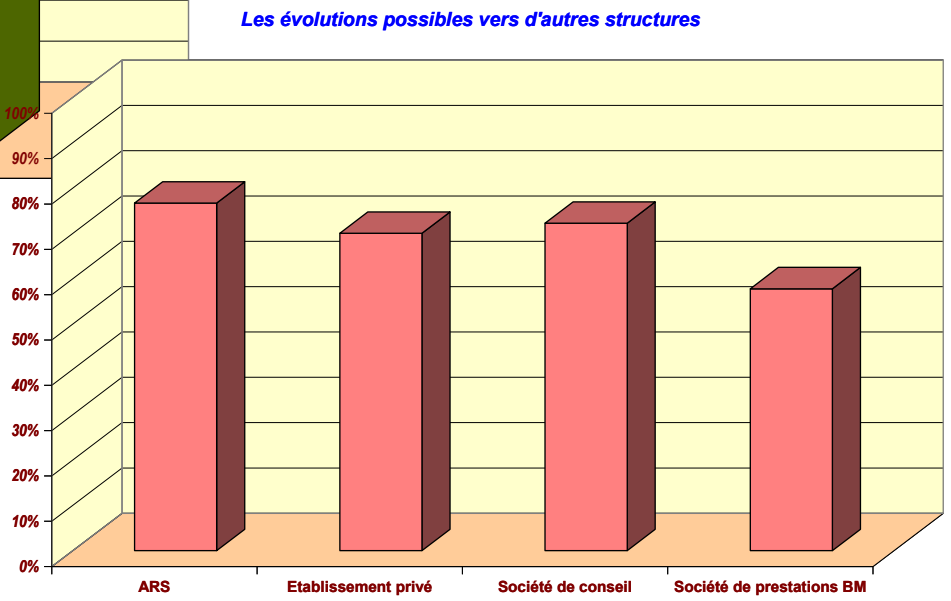


Quelles seraient en conséquence les compétences à développer ?

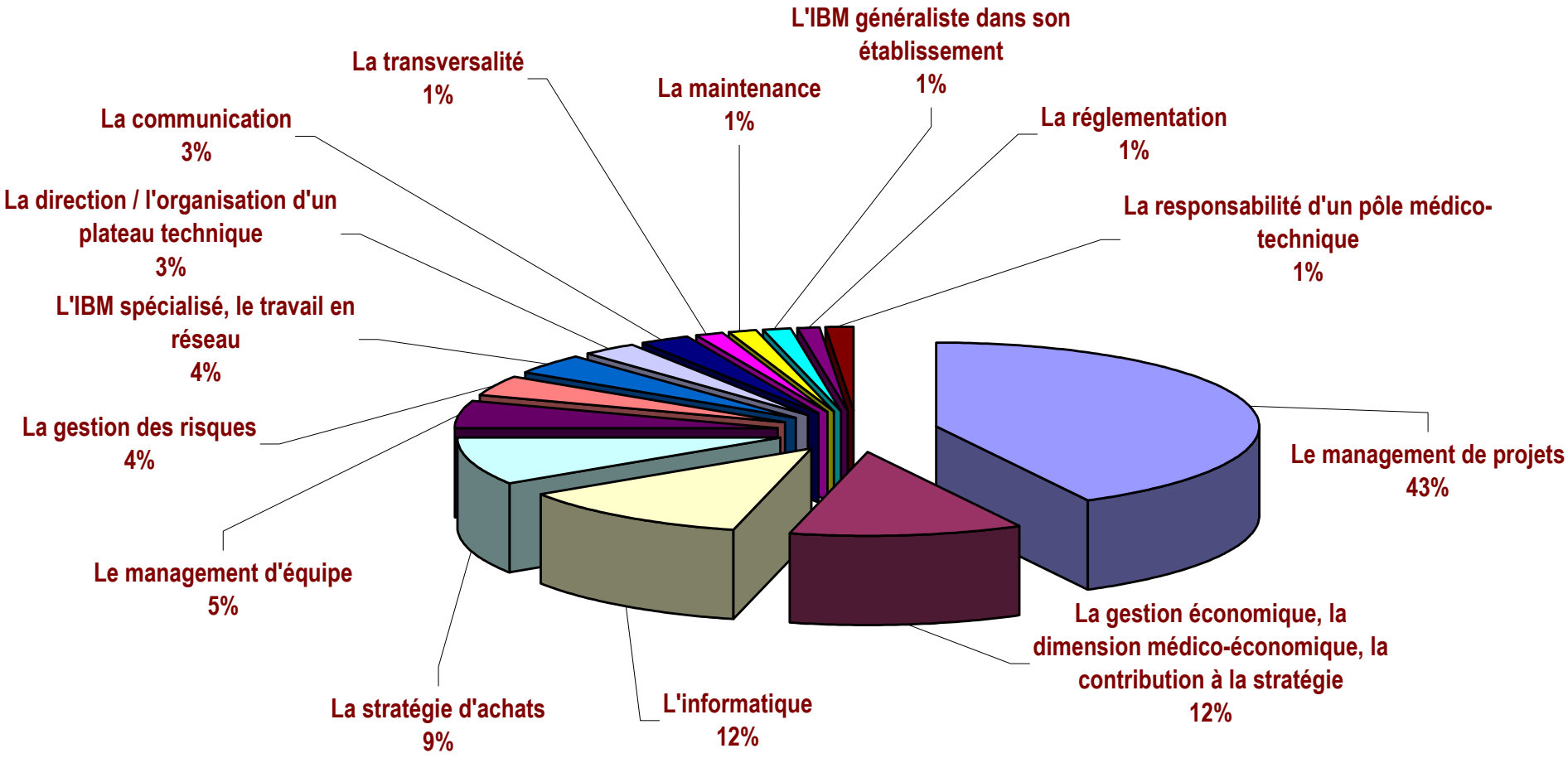


Peut-on concevoir une évolution des IBM vers d'autres structures que l'hôpital ? Lesquelles ?





Vous ne devez retenir qu'un axe d'évolution, lequel choisissez-vous ?



Professional Perspectives

- *As an engineer :*
  - *Technical expert,*
  - *Maintenance manager*
  - *Project manager*
- *Real job opportunities IF added value is shown and promoted*
- *Human intelligence and management skills needed …*