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### Introduction of new technologies in Rehabilitation : a change managment issue

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### Introduction

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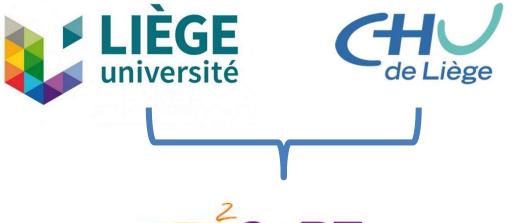
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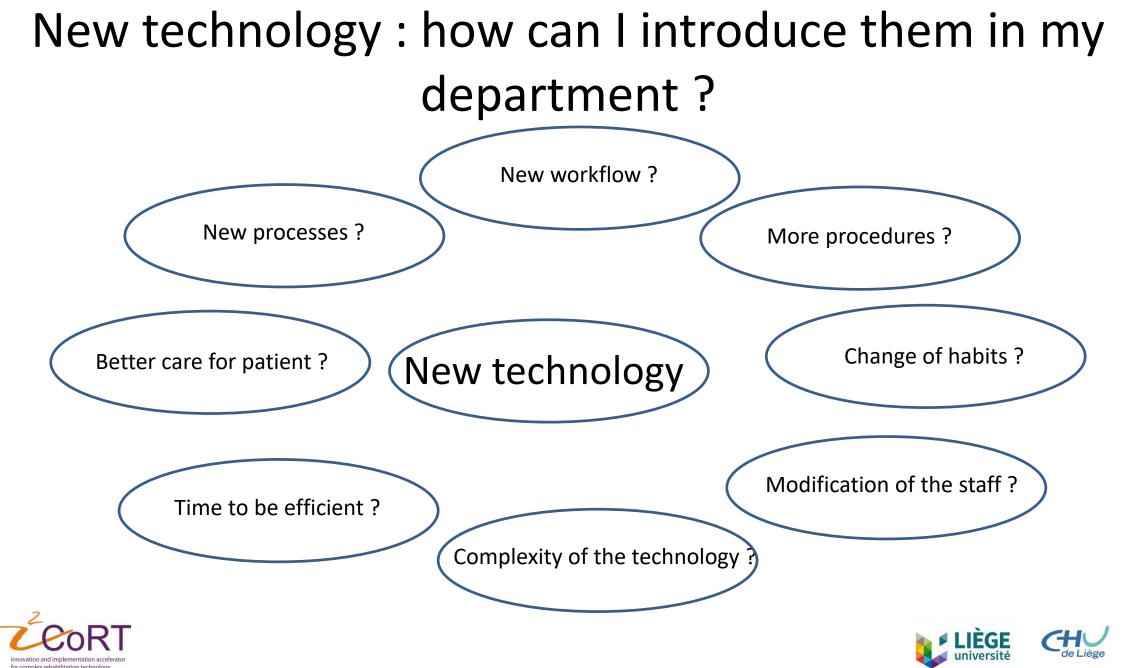




### New technology : how can I introduce them in my department ?



for complex rehabilitation technology



### Implementation process :

- 1. Adoption
- 2. Implementation
- 3. Sustaining
- 4. Spreading
- 5. Scale up







Poor/lack of adhesion from your staff...





### Change management ?

The Journal of Change Management in 2002 stated, "Change initiatives crucial to organizational success fail 70% of the time."

The **process** of introducing a new technology in a department is a real thing that needs to be anticipate in order to be successful.





### What are the threats of a bad implementation ?

# If a technology is not implemented successfully it may lead the staff to refuse the use of it

# Results : poor use, or even worse, bad use and risks of misstreating/hurting the patients





### Background

- "Change management" is a widely addressed problematic in literature.

- Experts and Consultants

... it is judicious on the part of the decision-makers to have a notion of the difficulties and methodologies in order to guarantee the best possible implementation of their new technologies into their organization.





### The process can be complex ! But not always

#### It is also important to know that the process is not UNIQUE but must be adapted to each context and situation

(of course !)





### Key-points / Factors in the implementation process

#### "Integrated Technology Implementation Model" (ITIM)

(Rhonda Schoville, University of Michigan, CIN Computers Informatics Nursing – 2015)

ITIM brings together the perspective of TAM and SI

TAM : Technology Adoption Model – focus on the user's perspective

IS : Implementation Science – focus on the organization's perspective





### Factors that influence the ITIM

Many factors can affect the process during its implementation.

Two main categories :

#### **INNER and OUTER factors**



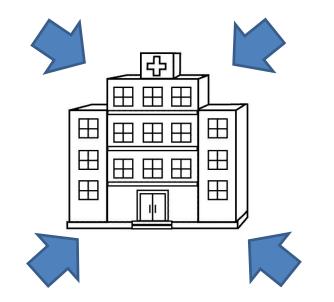




### Inner factors

Factors that are inherent to your organization :

- Nature and characteristic of the new technology
- Workflow
- Users/Staff
- Leadership
- Communication



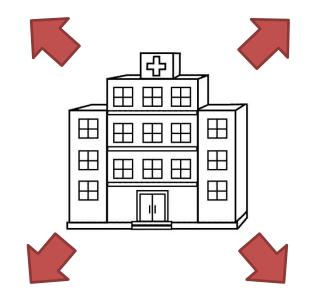




### Outer factors

Factors that are external to your organization:

- Accreditation regulation
- Economic environment
- Facilitators
- Vendors







### ITIM and Key Factors

#### Inner factors

- Nature and characteristic of the new technology
- Workflow
- Users/Staff
- Leadership
- Communication



#### Outer factors

- Accreditation regulation
- Economic environment
- Facilitators
- Vendors







### Where can I start ?

Can't / don't want to go through the whole process? Try these few easy tips:

- Identify in your staff several key partners or informal leaders on which you will count to help you through the process and include them at the very beginning of the process
- Identify the potential "barriers" (staff, innovation fatigue, ...) : don't try to avoid or ignore them !
- **Communicate** through the whole process to your staff !
- **Dedicate time / money / staff** to the process
- Months / years later, continue to evaluate and monitor the change, do some report on it to communicate through your staff and organization
- If possible, involve your teams in studies and write some articles about your work





### Closing word

#### Don't be afraid to lead change, it will always be rewarded !

Thank you for you attention





## Bibliography

- Health systems for prosperity and solidarity « How do we ensure that innovation in health service delivery and organization is implemented, sustained and spread ?
  « Ellen Nolte - World Health Organization 2018
- Innovation sustainability in challenging health-care contexts : embedding clinically led change in routine practice - - Graham P Martin, Simon Weaver, Graeme Currie, Rachael Finn, Ruth McDonald - Health Serv Manage Res. 2012 Nov
- Guiding Healthcare Technology Implementation: A New IntegratedTechnology Implementation Model – Rhonda Schoville & Marita Titler - CIN Computers Informatics Nursing · March 2015
- Understanding and managing organizational change: implications for public health management Jon M Thompson J Public Health Manag Pract Mar-Apr 2010



