Ingredients for a successful adoption strategy in the health care context – Empower clinicians

October 21, 2010

#### **Jean Huot**

CIO CHUM and MUHC

**Executive Director Syscor** 





# Agenda

- 1. Health care context
  - a) Core Business
  - b) Clinical Cost Containment
  - c) Multiple Stake Holders
- 2. Ingredient for a successful adoption strategy in the Health care context Empower clinicians

# **Health Care Context**Core Business

Best Care first and foremost

Also in a teaching hospital,

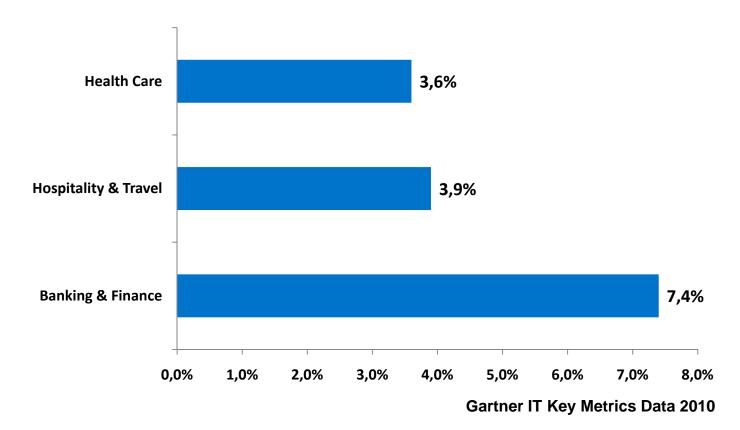
Emphasis on research, teaching and technology assessment

IT more and more part of the core business

# Health Care Context Clinical cost containment

## Lack of financial resources to address IT-IS needs

IT Spend as % of Operating Expense - 2009 for North America

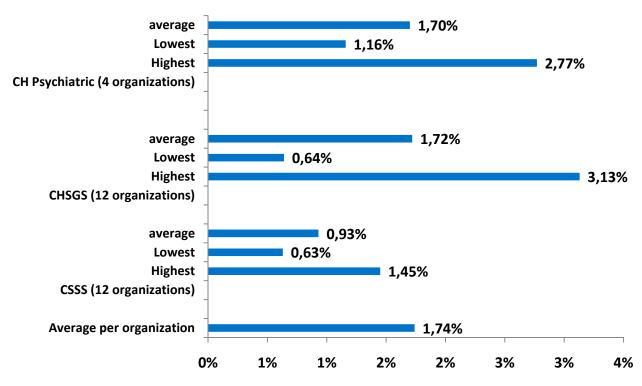


4

# Health Care Context Clinical cost containment

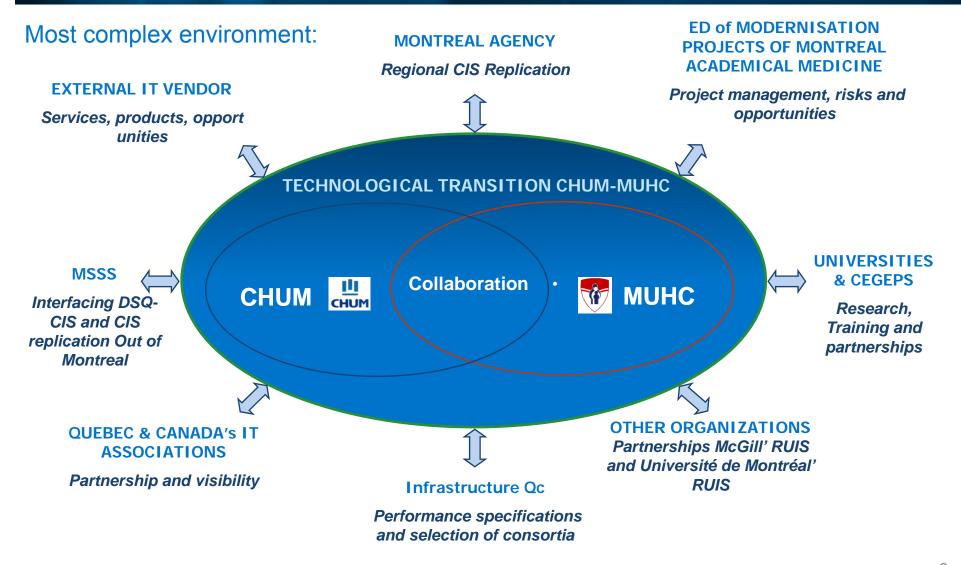
### Lack of financial resources to address IT-IS needs

### Average level of expense in IT for Montreal



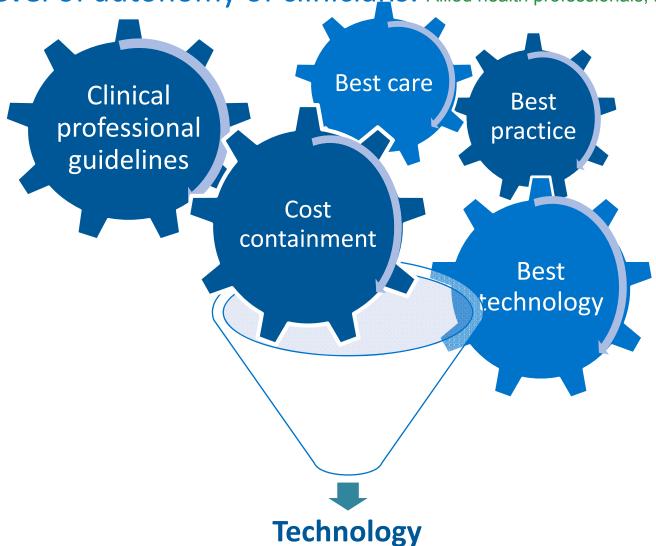
**Source: Montreal Agency** 

# Health Care Context Multiple Stake Holders or Share Holders



# Health Care Context Multiple Stake Holders

High level of autonomy of clinicians: Allied health professionals, Doctors, Nurses, etc.



Ingredients for a successful adoption strategy in the health care context – Empower clinicians

- Support by all layers of the organization from bottom up
- Provide meaningful objectives for clinicians:



Ingredients for a successful adoption strategy in the health care context – Empower clinicians



# Research conducted in USA

To Err Is Human: Building a Safer Health System (1999)



Adverse events in hospitals are responsible for 75,000 to 100,000 deaths per year in US.



1/₃ of these events were avoidable by introducing information technology when the prescription is issued.



# Research conducted in Canada

Baker GR. & al. The Canadian Adverse Events Study: the incidence of adverse events among hospital patients in Canada. CMAJ, 170(11):1678-86, 2004



Of 2.5 million admissions to acute care hospitals, 7.5% (185,000) experienced one AE or more during their stay.



70 000 of these events were avoidable.

Ingredients for a successful adoption strategy in the health care context – Empower clinicians



# **CPOE**

Prevention of In-patient adverse event



#### Needs associated decision support

55 % reduction in serious medication error rate. (Bates, JAMA, 1998)



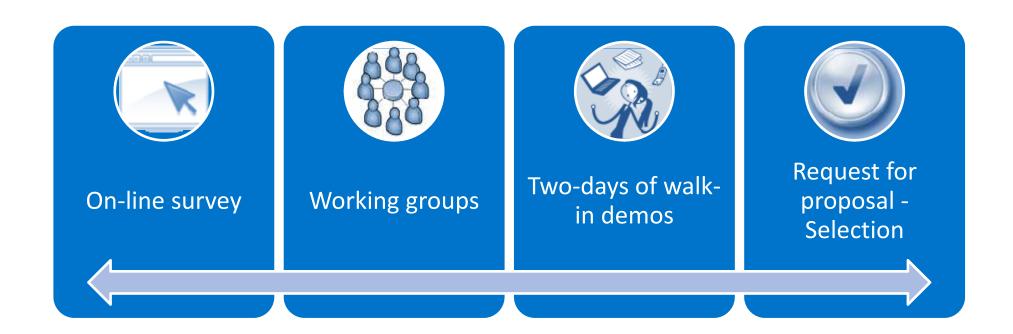
### Monitors and makes iterative changes

83 % reduction in overall medication error rate. (Bates, JAMA, 2000)

Ingredients for a successful adoption strategy in the health care context – Empower clinicians

# Help clinicians select what they need:

Define functional needs



Ingredients for a successful adoption strategy in the health care context – Empower clinicians

# Let clinicians define the implementation strategy:



# Ingredients for a successful adoption strategy in the health care context – Empower clinicians

# Let clinicians manage overall implementation strategy:

#### Chief Clinical Officer

Reports directly to the CEO.

Chair the clinical information system implementation committee.

Participates in the technological transition steering committee..

Chair the discussion table of clinical champions of the technological transition projects Obtain executive representation from each department

Participate in Regional, Provincial, Canadian and International forums.

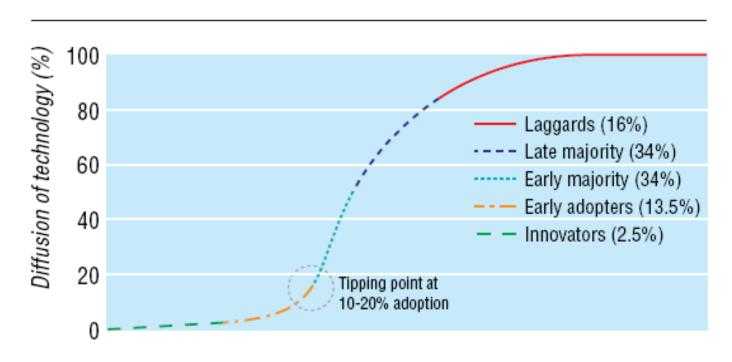
Generate discussions about technologies and information systems with clinicians and ensure their participation.

Takes comments from clinical champions and follows on issues pertaining to the technological transition projects.

Ensure the following with concerned people about projects evolution.

# Ingredients for a successful adoption strategy in the health care context – Empower clinicians

Let clinicians monitor benefits in health care:



Time

S-curve showing the five stages in adoption of innovations<sup>2</sup>

Rogers EM. Diffusion of innovations. 4th ed. New York: Free Press, 1995.

Ingredients for a successful adoption strategy in the health care context – Empower clinicians

### Outcomes at the CHUM and at the MUHC:

Oacis Uper user different per day

