

# Is Nursing Ready for the Emerging New Technologies for Health Information?

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## Objectives

- Identify the gains and losses with embracing new technologies in health and social care
- Be cognizant of the changing nature of nursing as influenced by technology
- Recognize the activities needed to retain a positive balance between nursing need and the emerging technologies

## Content

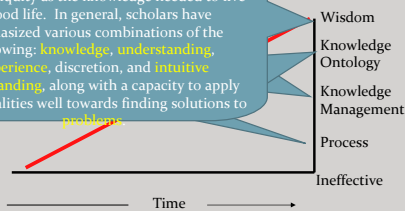
- Information and communication technology taxonomy
- Identification of Emerging technologies that may support health and social care
- Risk analysis around future roles in health and social care

The American Nurses Association, in its Scope and Standards for Nursing Informatics Practice defines nursing informatics as:  
*Nursing informatics (NI) integrates nursing science, computer and information science, and cognitive science to manage, communicate, and expand the data, information, knowledge, and wisdom of nursing practice.* (ANA, 2008)

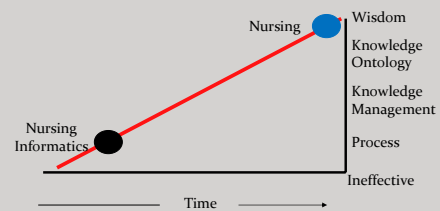
American Nurses Association (2008), Nursing Informatics: Scope and Standards for Nursing Informatics Practice. <http://nursingworld.org/books/pdescrcfm?cnum=1589781558102569> Last Accessed 19th May, 2009.

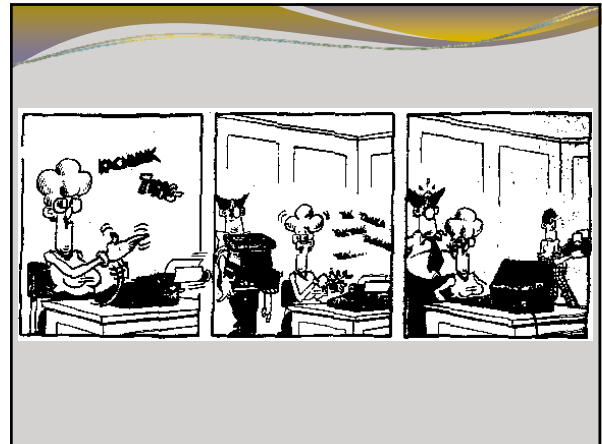
## Ineffectiveness to Wisdom

Wisdom is an ideal that has been celebrated since antiquity as the knowledge needed to live a good life. In general, scholars have emphasized various combinations of the following: **knowledge**, **understanding**, **experience**, discretion, and **intuitive understanding**, along with a capacity to apply these qualities well towards finding solutions to **problems**.



## Ineffectiveness to Wisdom





**Knotted/Unknotted (R D Lang)**

“There is something I don’t know that I am supposed to know, I don’t know what it is I don’t know, and yet am supposed to know,  
 And I feel I look stupid if I seem both not to know it and not know what it is I don’t know.  
 Therefore, I pretend I know it.

This is nerve-wracking  
 since I don’t know what I must pretend to know.

Therefore, I pretend to know everything.

I feel you know what I am supposed to know  
 but you can’t tell me what it is  
 because you don’t know that I don’t know what it is.

You may know what I don’t know, but not that I don’t know it,  
 And I can’t tell you. So you will have to tell me everything.”



## Emerging Technologies

Hibernation or Suspended Animation



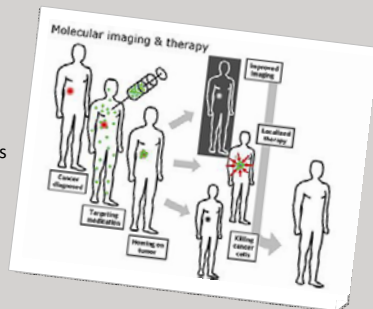
## Emerging Technologies

Radio Frequency Identification



## Emerging Technologies

Nanotechnologies



## Biotechnology

Biotechnology advances are increasing life expectancy to new heights.

It is estimated that by the year 2050 people born in that year will expect to reach the age in excess of 150 years. By 2300 people born in that century are likely to see the next millennium.

What age does schooling stop? When will retirement be? Will life-long learning be possible? How will healthcare be prioritised?

## Challenge

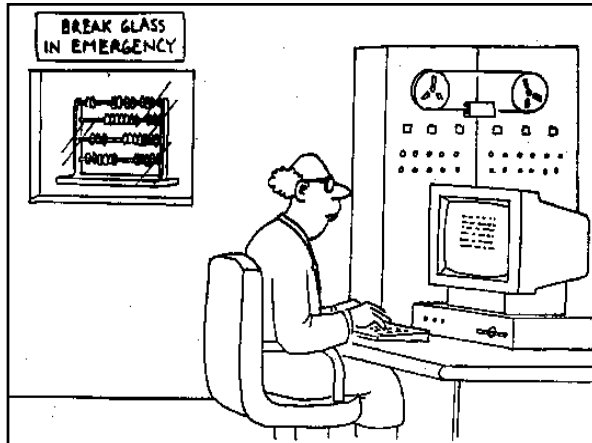
The challenge in healthcare will be to continue under the pressure of expectations of care by the public. The more information individuals can get the more information they are likely to use to support their demand for treatment. In both public health services and those provided within a framework of private care there are serious concerns that the provision cannot cope with the expected onslaught. Are we preparing front-line staff with the skills necessary to 'defuse' the potential anger and frustration?

## Pandemic

The greatest pandemic facing the world is the widespread demographic changes, it is estimated that in 50 years time the percentage of those in retirement will be over 50% of the population in most western countries. It is also estimated that by 2050 there will be some 15% of population as minors, leaving only 35% of working age. Healthcare will have to cope with these changes especially with the increase of older people receiving acute and active care. Are we already preparing for this, extending retirement age to 70 or 75; or considering euthanasia?

## Hunger for Information

The hunger requires of us to prepare the next generation of clinicians with the ability to be information 'wise' in order that we do not become greedy or overly choosy, but rather we remain balanced and in control of information for the benefit of patient care.



Thank You



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