Advancing Nursing & Midwifery through Innovation and Leadership

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Learning Objectives

• Apply principles and strategies to advance the profession and improve global health.

• Discuss proactive behaviors most effective in creating solutions to emerging global health care challenges.

• Describe your personal vision, purpose, and passion to be an innovative leader.
Innovation is essential for the future of global health and the profession.
“We cannot solve the problem with the same thinking we used to create them.”

Albert Einstein
Innovation

“Something different that has impact.”

Scott D. Anthony
Importance of Innovation

“To solve problems today in a way that positions us to address unforeseen problems of tomorrow.”

www.rockefellerfoundation.org
To solve problems we need visionary, creative ideas and innovative solutions

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We Need More Leaders!

(www.imagination3.com.au)
Innovation

- Outcomes with Practical Applications
- Based in Science
- Creating Solutions
Need Innovation to Address:

• Improved Quality Care
• Increasing Demands in Health Care
• Global Workforce Shortages

(www.slideshare.net)
Success across time can’t sustain growth without innovation.
Without innovation and change, organizations stagnate and die.
The Story of an Aged Organization
An ugly picture

Kodak’s:

share price, $  

employees, ’000

Sources: Company reports; Thomson Reuters
Innovative Environment:

Leaders must role-model positive and adaptive responses to change.
Innovation Shouldn’t Happen by Accident
the only constant in life is change.

we've always done it this way

Forces resisting change
THERE'S NO SUCH THING AS SMALL CHANGE.
Regardless of the type of change, all major change brings feelings of achievement, pride, loss, and stress.
What is your risk-taking propensity in attempting innovation?
Sometimes foolhardy?

Not well thought out?
Rarely Wise?
Whenever possible, all those who may be affected by innovation should be involved in planning.
Technology will continue to bring both challenges and opportunities in the future!
Six Innovative Technologies that have Changed The Face of Healthcare

1. Genetics and genomics
2. Less invasive and more accurate tools for diagnosis and treatment
3. Robotics
4. Biometrics
5. Electronic health records
6. Computerized physician/provider order entry and clinical decision support
Emerging Critical Skill Set:

Having Expertise in Knowledge Information, Acquisition, and Distribution
In a profession where knowledge doubles every eight years *(Carroll, 2001-2016)*, nurses can no longer be the keeper of knowledge; instead they must become the master of collecting and sharing that knowledge with others.

Emerging Critical Skill Set:

Understanding and Using Genomics in Practice
Technology as a Leadership Competency

The ability to integrate technology which facilitates mobility and portability of relationships, interactions, and operational processes.
Leadership Challenges in Integrating New Technology

1. Balancing the human element with technology
2. Balancing cost and benefits
3. Training a technology enabled workforce and assuring ongoing competency
4. Assuring that technology use is ethical
Is need driving technology or is technology driving need?

Cost-Benefit Analysis

Benefits  Costs
We need to avoid being enticed by technology for its own sake—and be clear on the precise problem the new technology is designed to solve.
Perhaps the greatest challenge for healthcare leaders?

Balancing technology and the human element
Other Challenges?

- Ethical Considerations
- Difficult Choices
Wadhwa (2014) suggests that with the pace of technology growth, we have not been able to come to grips with what is ethical, let alone determine what laws or rules should be in place.

Ethical Considerations:

- Dignity/autonomy
- Technology as a potentially cold/dehumanizing part of care
- Technology as a potential contributor to disparities of care
- Nursing’s and midwifery’s voice
Evolving technologies offer great opportunities to improve the quality of life, but technology alone is not the answer. We must consider, however, what technology is best in each setting and how it should be used ethically. In addition, care providers must understand every technology’s limitations as well as its benefits.
GENETICS AND GENOMICS
Carroll (2001-2016) suggests that by the year 2020, the healthcare system will have transitioned from one which “fixes people after they’re sick” to one of preventative, diagnostic genomic-based medicine where patients will be treated for conditions we know they are likely to develop.

Organ transplants will no longer be needed because we’ll be able to grow new organs from a patient’s own tissues.
Circulating nanobots will identify and repair disease processes.
3-Dimensional (3D) Printing
Skill Sets Needed to Merge Innovations and Technologies

1. Being able to use technology to facilitate communication and relationships.
2. Having expertise in knowledge information, acquisition, and distribution.
3. Understanding and using genomics.
For example, genetic testing can now prevent disease, but it also creates a new set of moral, legal, ethical, and policy issues:

- If the testing is useful, how do we provide equal access? What are the potential privacy issues and how do we protect this very personal and private information?
- Which genetic abnormalities warrant some kind of intervention? How do we ensure that the information provided by genome analysis is correct (especially in the case of at-home tests)?
- Are we headed towards a new era of therapeutic intervention to increase quality of life, or a new era of eugenics?

I’ve been genetically sequenced!!

But it’s not something that should be taken lightly.
CRISPR/Cas9

Definition:

- **Clustered Regularly Interspaced Short Palindromic Repeats/CRISPR associated protein 9**
- **Genome (gene) editing**: technologies that enable scientists to change an organism’s DNA

Muscle cells, edited with CRISPR to fix the mutation that causes muscular dystrophy. These cells are in a lab dish, though, not in a person.

(Source: https://vitals.lifehacker.com/what-is-crispr-and-what-can-it-really-do-1826000682)
Strategies and Actions

Avoid Barriers
✓ Afraid to Fail
✓ Reluctant to Change
✓ Custom and Tradition
✓ Lack of Support and Resources
• Be a passionate, visionary, innovative leader with purpose
• Belong to and be active in professional associations
• Support global health initiatives
• Collaborate within and across disciplines
• Develop and support leaders
Dewitt Jones
National Geographic Photographer
Be the best leader IN the world?
Be the best leader for the world

• Act with service and grace.
• Make a contribution through action.

D. Jones
Celebrate as you continue your journey!