THE DIFFUSION OF INNOVATION
Diffusion of innovation is a theory that seeks to explain how, why, and at what rate new ideas and technology spread through cultures.

Everett Rogers, a professor of communication studies, popularized the theory in his book Diffusion of Innovations;

The book was first published in 1962, and is now in its fifth edition.
OBJECTIVES

- Define and describe diffusion of innovations as a model for change
- Identify components of the diffusion model
- Describe how the diffusion model can be used for implementation
**WHAT IS DIFFUSION?**

- The process by which an *something new is communicated* through certain channels *over time* among the members of a *social system*.
- The newness of the idea gives diffusion its special characteristic – it ensures that a degree of *uncertainty/risk* is involved in diffusion.
DIFFUSION

- **Uncertainty** – implies lack of predictability - range of alternatives - and therefore of.

- **Communication** - Process whereby participants share information to reach a mutual understanding

- **Information**
MORE PRACTICALLY

- Everett Rogers: “Good ideas do not sell themselves”

- Diffusion is about 3 distinct processes:
  - Presentation
  - Acceptance
  - Integration
THE USUAL WAY

Implementation of new models or practices is left to:
  pilot tests
  trial and error
  imposition by ext regulators
THE DIFFUSION WAY

- Is a means of reducing uncertainty.
- Enhances sustainability
- Takes the guess work out of what may or may not work

- The challenge is not basic or applied science, but rather dissemination or implementation science, which is not a part of the traditional EBP model, with its focus on effects and outcomes.
DISSEMINATION

By focusing on diffusing innovations as dissemination science allows consideration of:

- External validity: replication of those positive effects and outcomes from EBP across dissimilar settings and conditions
- Scale-up: replication of those positive effects and outcomes from EBP across similar settings and conditions
THE INNOVATION

- A practice, idea, product perceived to be new by an individual or group.
  - Idea: new way of thinking
  - Practice: new way of doing
  - Product: new equipment, device or technology to use
THE INNOVATION-DECISION PROCESS.

- Implementation occurs when a decision is made to put an innovation into use.

- It occurs in stages:
  - Knowledge
  - Persuasion
  - Decision
  - Implementation
  - Confirmation
FACTORS AFFECTING THE RATE OF ADOPTION

- Attributes of the innovation
  - How complex is it
  - What are its advantages
  - How compatible with current ways of doing or thinking
FACTORS AFFECTING THE RATE OF ADOPTION

- Compatibility

- Is the innovation consistent with the group’s existing values, past experiences and needs?
FACTORS AFFECTING THE RATE OF ADOPTION

- Complexity

- Is the innovation easy to use and simple to understand?
FACTORS affecting THE RATE OF ADOPTION

- Complexity—cont

- Sometimes it is easy to come up with an acronym

- For example: the use of FACES to assess for HF
FACTORS AFFECTING THE RATE OF ADOPTION

- Trialability
- Can the innovation be tried out?
FACTORS AFFECTING THE RATE OF ADOPTION

- Observability
- Are the results observable?
SOMETIMES THERE IS A NEED TO RE-INVENT

- ‘tweaking’ the innovation
- May foster faster adoption when users participate in customizing a better fit to their work routines
- The danger here is altering the innovation to the point where it has no impact.
THE DECISION TO INNOVATE

- Optional—individual choice
- Collective—decision by a group, consensus
- Authoritative—top down MUST DO IT!
COMMUNICATING

- Open and transparent lines of communication are key in any adoption of an innovation
- Staff must know how, when and why the innovation is being suggested
- Staff must be able to engage in discussion about the innovation and be given the opportunity to ‘tweak’

- COMMUNICATION DECREASES THE UNCERTAINTY AND RISK ABOUT THE INNOVATION
MEANS OF COMMUNICATION

MASS INFORMATION

- Create awareness, increase knowledge
- Provide a favorable impression

- Educational sessions
- Staff meetings
- Task force
- Focus group
- Posters
- Fact sheets
Means of Communication

- Interpersonal communication
- Communication can move up or down the hierarchy
- Staff networks
  - Staff discussions of trial use and perception of the innovation
  - Use of opinion leaders and change champions—those who can influence the diffusion and its adoption
  - Communication can be vertical or top down
  - The shadow system is in effect here (rumors, gossip)
ADOPTER CATEGORIES

- Innovators—the top 2.5%
- Early adopters—13.5%
- Early majority—34%
- Late majority—34%
- Laggards—16%

- The same people are not always in the same category. It depends on their perception of the innovation. They can change categories.
INNOVATION

- Are you a innovator, early adopter, early majority, late majority, laggard

- Dropping chemistry from the undergraduate nursing curriculum

- Development new nurse residency programs of 6-8 months
USING THE DIFFUSION MODEL HELPS TO:

- Identify innovation attributes
- Uncover facilitators and barriers
- Gain an understanding about relationships
- Recognize strengths/weaknesses in the system
- Speed the rate of adoption
- Enhance the science of dissemination
How do you diffuse

1. Analyze the innovation attributes. What are the benefits and risks for each of your groups
   - RN, LPN, CNA, MD, administration, regulators

2. Analyze social networks
   - Who are the opinion leaders and change champions
   - How does staff fit into adopter categories
   - What is the level of interaction among staff across levels, disciplines, roles

3. Assess communication channels
   - Who talks to who
   - Who is the ‘go to’ person
   - Who gossips
   - Is there a shadow system of communication
   - Who stirs up controversy
4. Understand your facilitators

- Is the innovation better than the status quo
- It is easy to use, understand, do
- Is it congruent with existing values
- Can results be seen as outcomes
- Can it be tried out and modified
- Is it favored by opinion leaders
- Is there an active and diverse social network that can promote a favorable opinion.
Does anyone want to share an example with the group?