

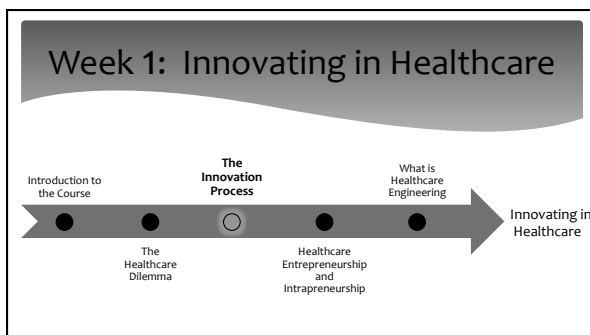
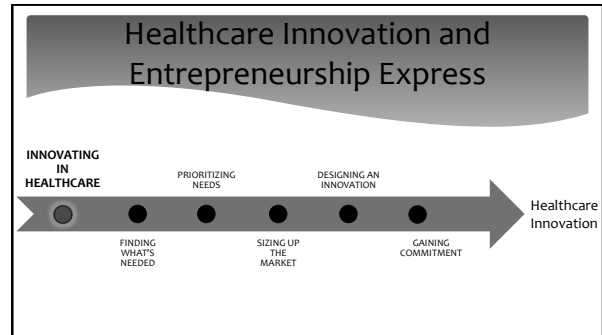

## The Innovation Process

### Four Phases

Bob Barnes and Marilyn Lombardi

**Duke**  
UNIVERSITY

1

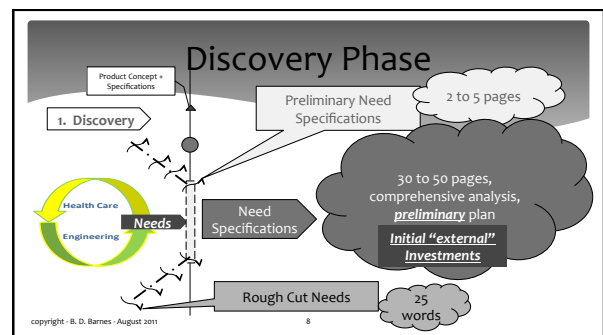
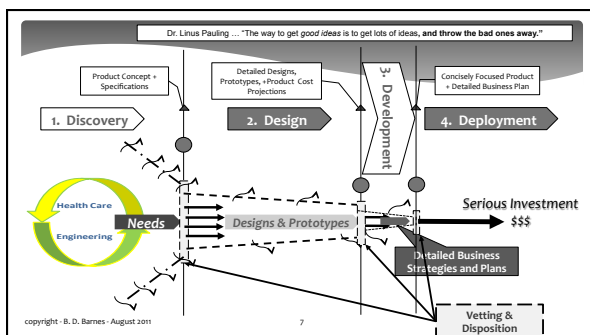
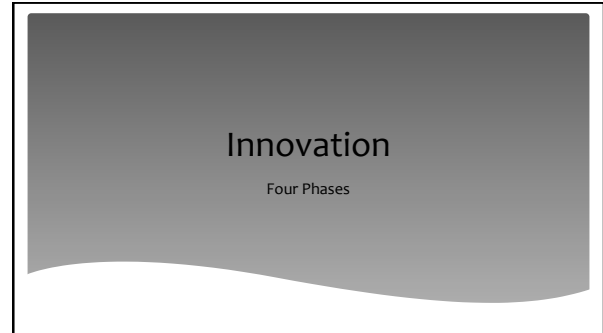



Practice!!!  
By/for whom?

## The 800 pound Gorilla

Innovation = the processes through which creative ideas are translated to practice.

James Brian Quinn



## Example: Rough Cut Needs

No.	Need
1	There is a need for a more efficient and durable device to allow for movement of fluid between parts of the body.
2	There is a need to accurately determine whether surgical intervention is necessary.
3	There is a need to more easily sew wires during spinal fusion such that they don't fray.
4	There is a need for a more efficient method of reducing pressure on nerves emanating from the spine that will reduce reoccurrences.
5	There is a need for a more reliable method of determining where to place screws during spinal fusion.
6	There is a need for visitor IDs that do not fall off.
7	There is a need for a bed that can be adjusted without using your hands.
8	There is a need for an easier method of putting on gloves and sterilized gowns by yourself after scrubbing.
9	There is a need for the doctor to order x-rays to be taken without the help of the surrounding nurses.
10	There is a need for a way to make it easier for the scrub nurse to find the appropriate tools during surgery.

173 total!

## Innovation – Controlled Chaos

### Innovation

- Need oriented
- Un-predictability
- Complexity – cross disciplinary
- Time limited
- Disruptive
- Fanatical commitment

### Bureaucracy

- Top management isolation
- Intolerance of fanatics
- Accounting practices
- Rationalism
- Inappropriate incentives

Managing Innovation: Controlled Chaos by James Brian Quinn – 1985 – HBR May-June, pages 73-83

10

## Summary

*Innovation Process*

11