

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION



الإمارات العربية المتحدة  
وزارة الصحة ووقاية المجتمع

# **The science of patient safety**

**Patient Safety Conference and Workshop**

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# Outline

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Introduction



02

Assumptions and reality



03

How to make it happen



1. Leadership for patient safety
2. Understand the principle of WAI & WAD
3. The design of patient safety
4. Culture of patient safety
5. People encouragement in the science of patient safety
6. Effectiveness of improvement actions
7. Stories and numbers
8. Sustainability of the program

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Conclusion





	Assumptions	Reality
1	Hospitals are safe places for healing	Hospitals are places associated with risk & patients' harm. Risk to die 1:300- Air line 1: 3 millions
2	Well-trained, passionate and compassionate practitioners do not make errors	Adverse events often occur because of system breakdowns including handoff patients care between practitioners
3	There is a single or few root causes why people make errors that lead to adverse events	Errors are complex. Systems engineering design contributes to prevent errors and improve patient safety
5	Errors happen due to mistakes during the interactions between front line staff and patients	"active" errors at the "sharp end"—where practitioners interact with patients or equipment—result from "latent" errors
6	Training and counselling as well as developing strict policies and procedures shall reduce the percentage of errors and patients' harm	Errors could be reduced by redesigning systems and processes using human factors principles. including standardization, simplification, and the use of constraint
7	Reporting adverse events is a bad experience lead to inappropriate consequences including shame and psychological harm	Blaming individuals had a toxic effect and lead to low reporting. The more error-related information are shared, the better lessons could be implemented industry-wide



# The science of patient safety

## Definition:

Patient safety is **a discipline** in the health care sector that **applies safety science methods** toward the goal of achieving a trustworthy system of health care delivery. It minimizes the incidence and impact of, and maximizes recovery from, adverse events. *Linda Emanuel & etal 20*



## Dimensions of Quality

- Safety
- Effectiveness
- Patient-Centeredness
- Timeliness
- Efficiency
- Equity



No Needless deaths  
, pain or suffering or even  
unwanted waits as well as  
no waste for Anyone

*Modified definition from IHI*



# The science of patient safety



"ومن أحيائها فكأنما أحيى الناس جميعاً"  
سورة المائدة (32)

"If any saves a life it is as if he saves the lives of all  
mankind"

the Feast verse 32

- The unique situation it is about human life or a human function
- The opportunities of improvement in patient safety are plenty



03

How to make it happen



# Leadership of the program

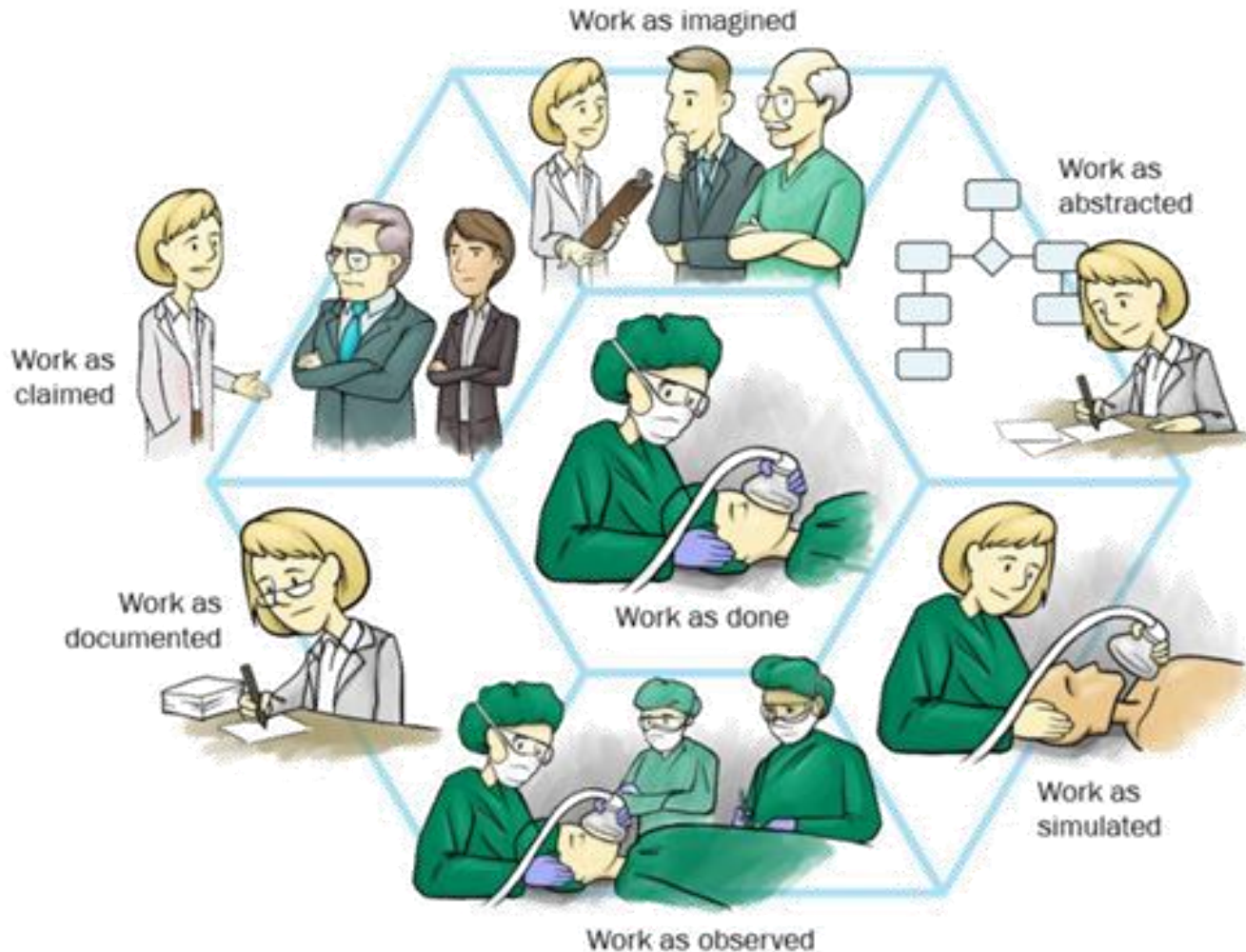
- The leader is the chief meaning officer
- High calliper individuals
- Shows commitments
- Gets involved
- Provide resources



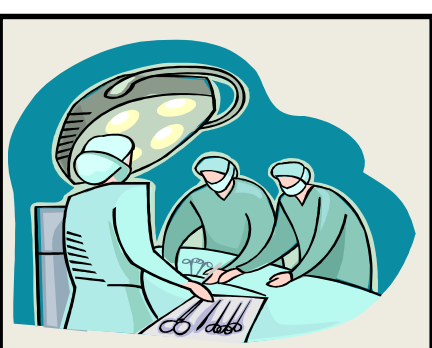


# Work as imagined and work as done

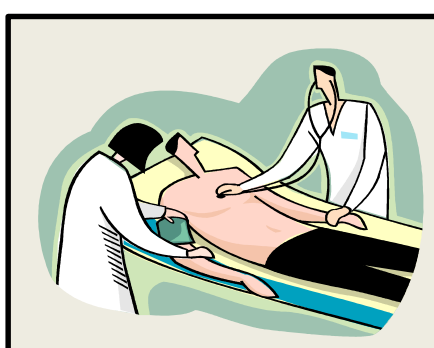
## WAI&WAD



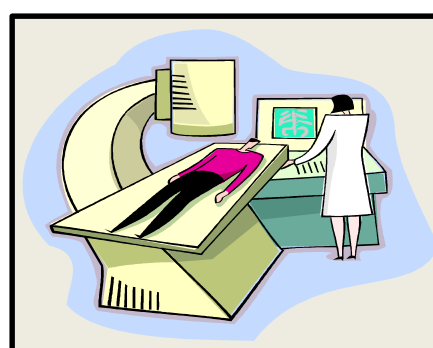




**Surgery**



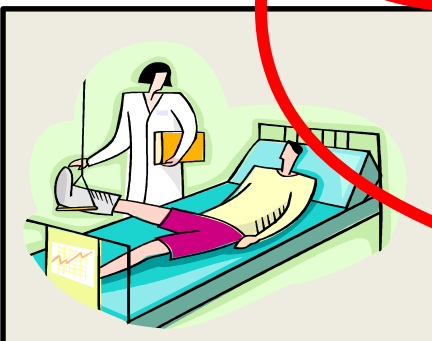
**Recovery**



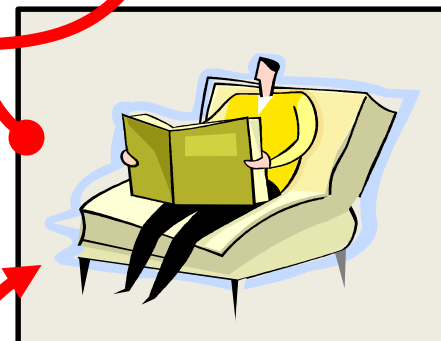
**Radiology**



**Exam Room**



**Ward**



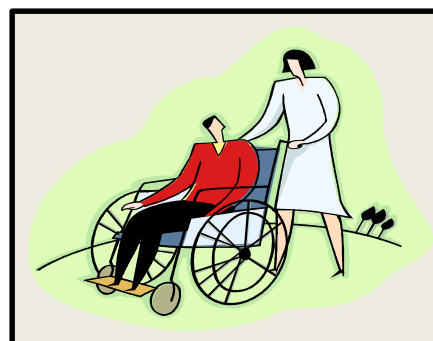
**Waiting Room**



**Lab**



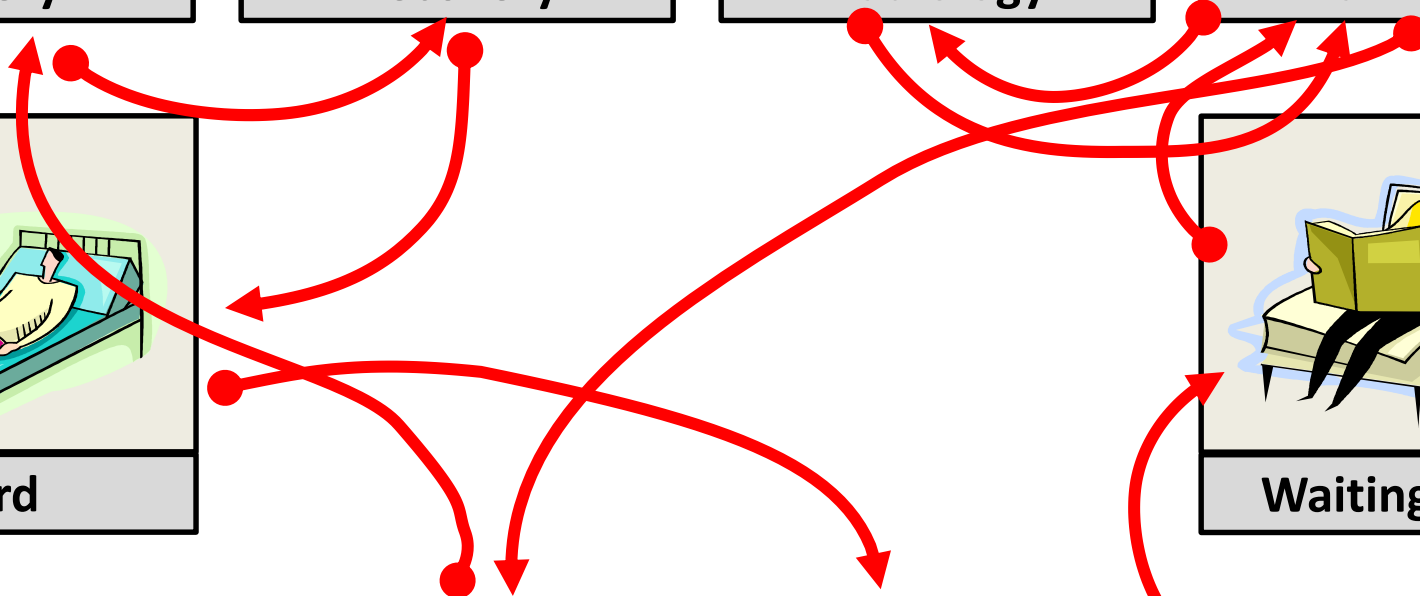
**Pre-Op**



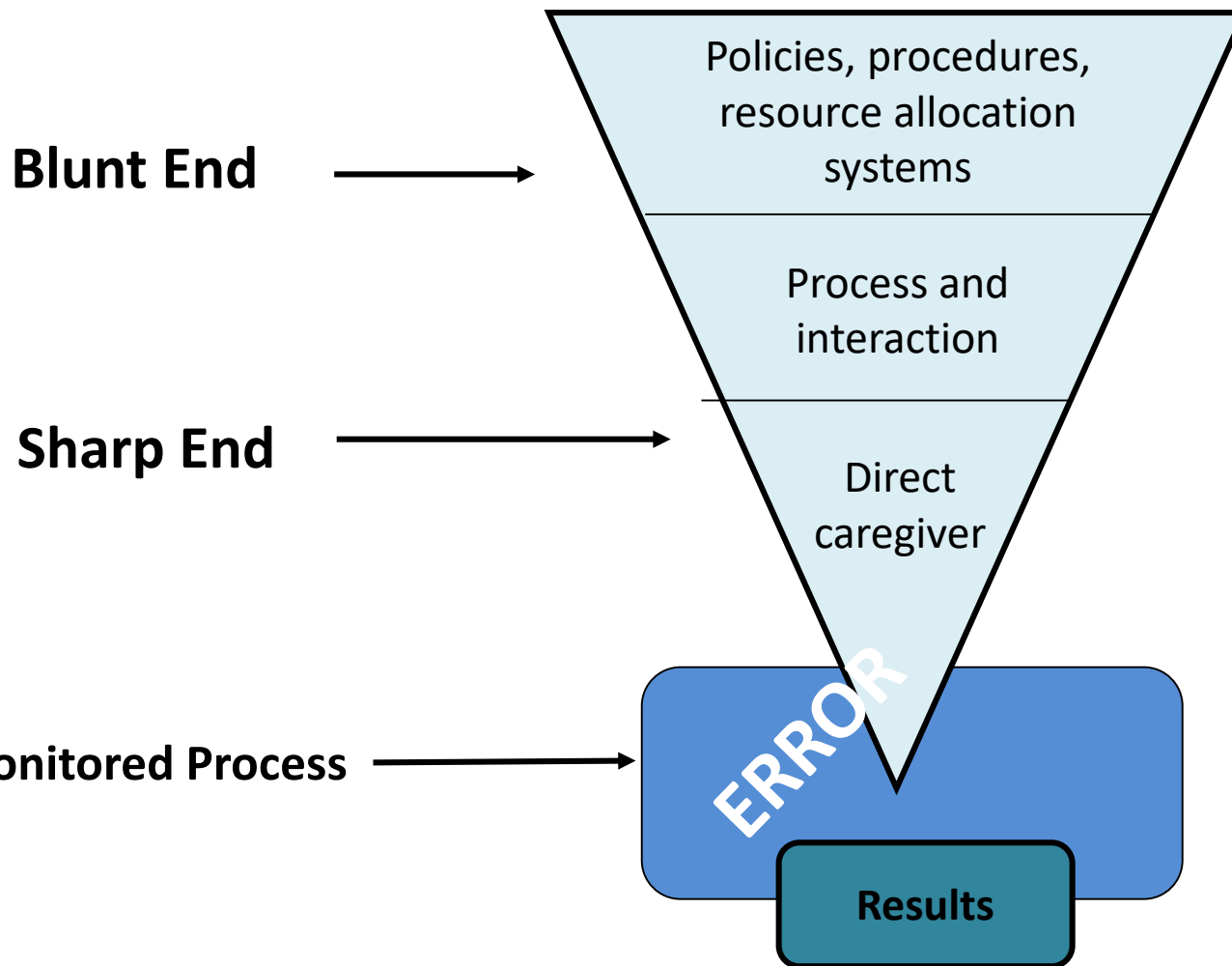
**Discharge**



**Intake**

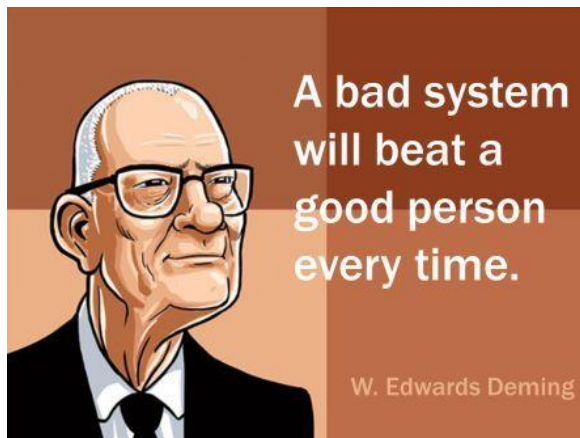


# System design for patient safety





# System design



A bad system will beat a good employee every time



# Culture of patient safety



Starts with reporting the opportunities

Normalization deviances

At-risk behavior

Reckless behavior





# It's the way how things are done here...

In the end, culture will trump rules, standards and control strategies every single time, and achieving a vastly safer NHS will depend far more on cultural change than on a new regulatory regime

*Don Berwick*





# People encouragement



- Make it simple
- What's in it for me.
- Listen to people
- Involve every one
- Focus on out come
- Link with performance appraisal



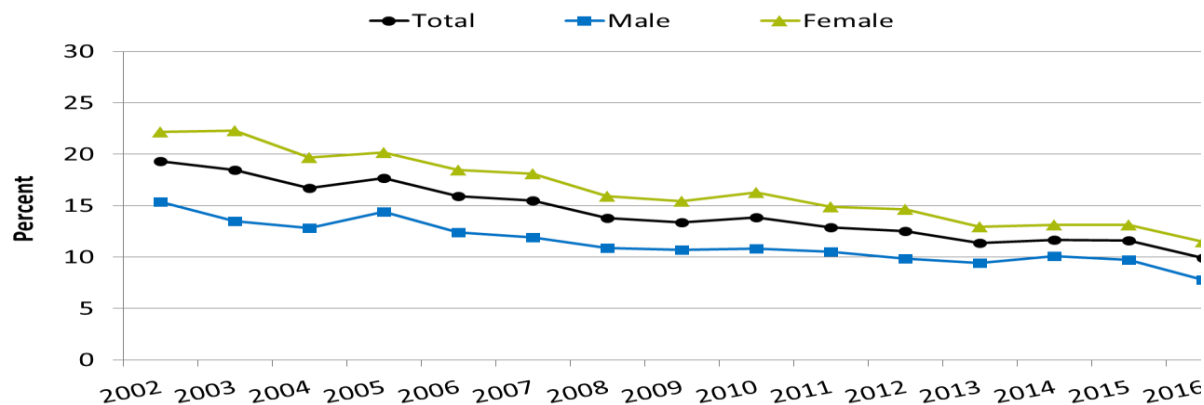
# Effectiveness of patient safety improvement actions

- **Weak actions** these action are considered as weak actions .  
Related to human
  - Training
  - Policy
- **Intermediate actions.**
- Actions are connected with tools to facilitate human compliance (checklist)
- **Strong actions**
- Actions of systems or process design which minimize or eliminate the role of the human.

# Stories and numbers

- Tell stories to the governance and leaders
- Credible analysis and data validity
- Feedback

Adults age 65 and over who received in the calendar year at least 1 of 33 potentially inappropriate prescription medications for older adults, by sex, 2002-2016



Nursing Home Survey on Patient Safety Culture results, 2019

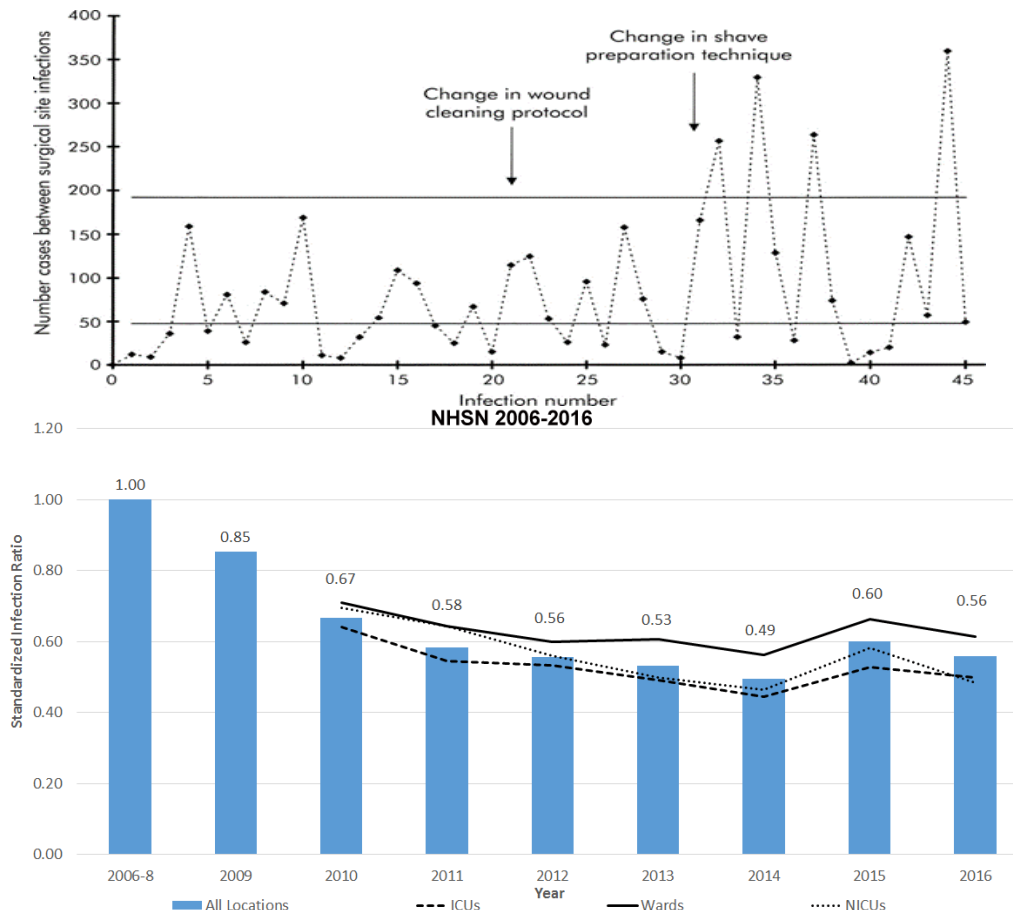






# Sustainability of the improvement

## A common scenario



Patient safety improvement initiatives are projects to be implemented with a time frame limit. ...

# How can you sustain improvement ?

- There are 2 ways for sustaining improvement:
  1. Being very lucky
  2. Planning for sustained improvement





# Conclusion

## Take Home Message

- Focus on system design
- Take care of people
- Close the loop of improvement



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