

# Matching Technology with Health Care Needs and Infrastructure

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**Carlos E deAlmeida Ph.D. ABMP, FAAPM**  
**Full Professor in Medical Physics**  
**Chairman, Radiological Sciences Laboratory**  
**State University of Rio de Janeiro**

**ex: IN RADIATION ONCOLOGY**

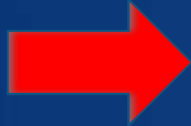
**First question !**

**What shall one consider**

to ensure the appropriate use of new technology by the developing countries from:

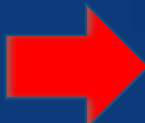
**safety, economical and societal viewpoint**

**SAFETY**



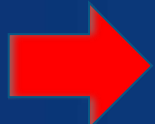
- **PUBLIC**
- **ENVIRONMENT**
- **WORKERS**



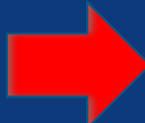


**LICENCING PROCESS  
BASED ON BSS**

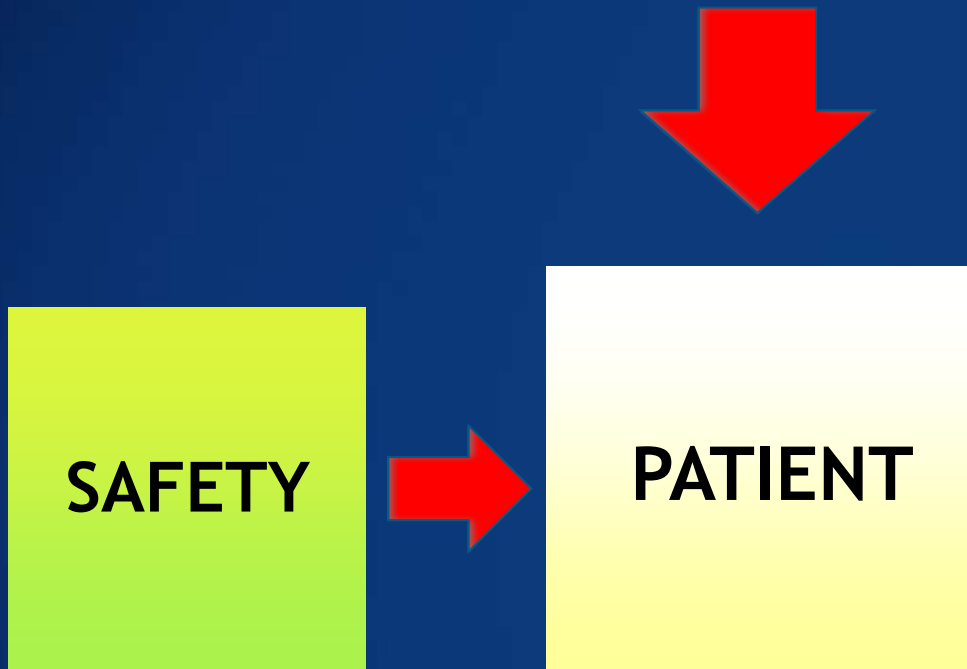
**SAFETY**



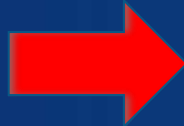
- **PUBLIC**
- **ENVIRONMENT**
- **WORKER**



**ANNUAL  
COMPLIANCE**



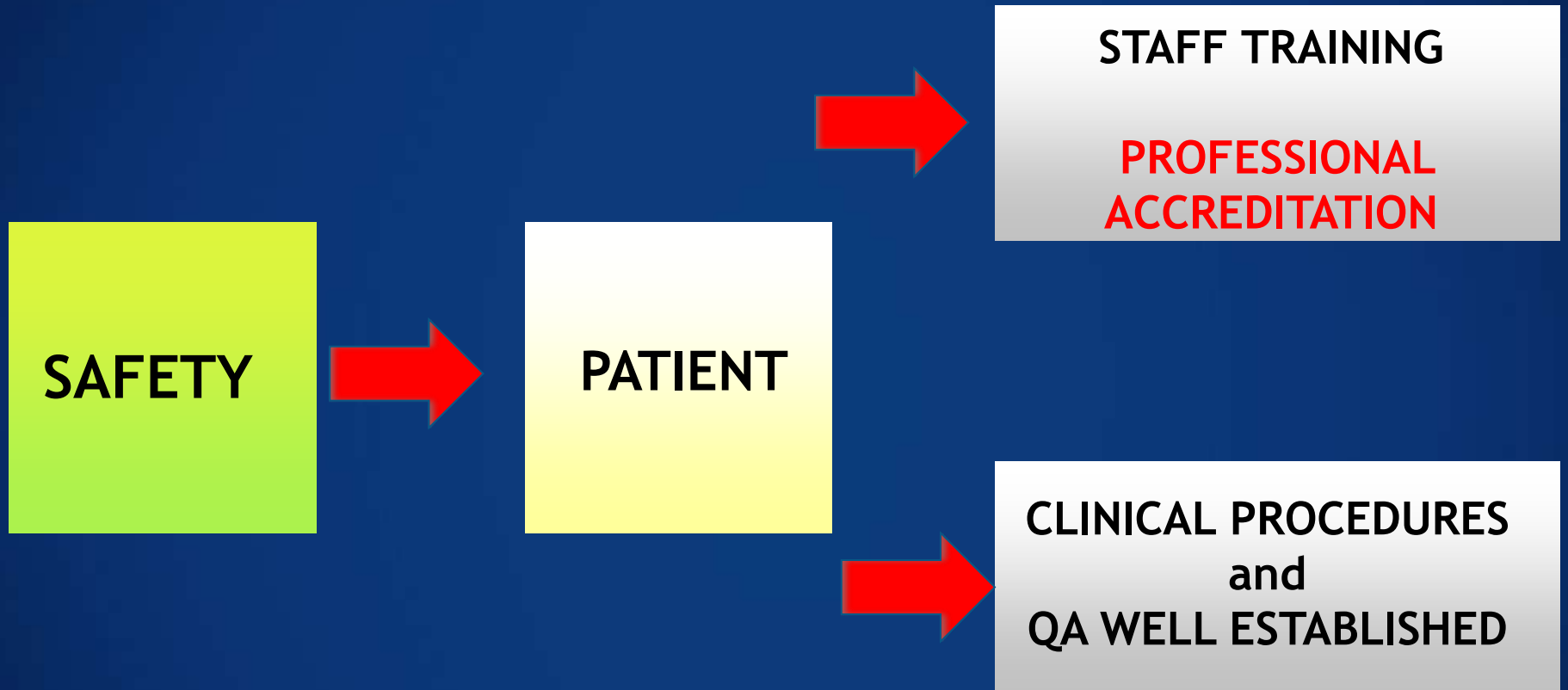
**SAFETY**

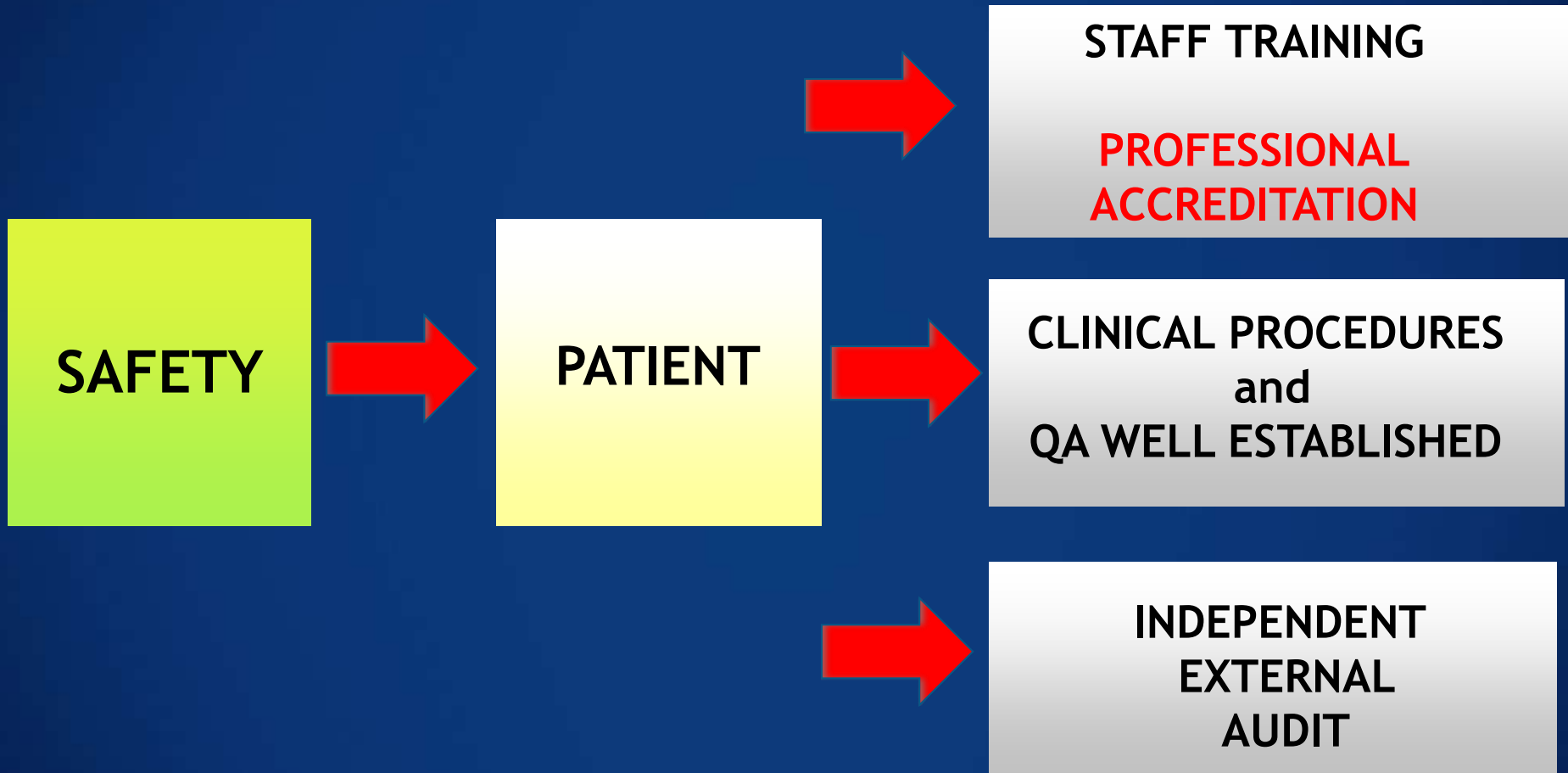


**PATIENT**



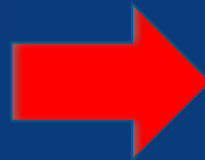
- **STAFF TRAINING**
- ***PROFESSIONAL ACCREDITATION***





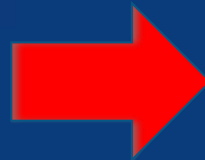


**SOCIETY  
POINT OF  
VIEW**



**ARE ALL OUR  
PATIENTS  
BEING  
TREATED?? !!!**

**SOCIETY  
POINT OF  
VIEW**

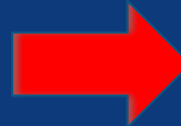


**ARE OUR  
PATIENTS  
TREATED AS  
THEY SHOULD??**

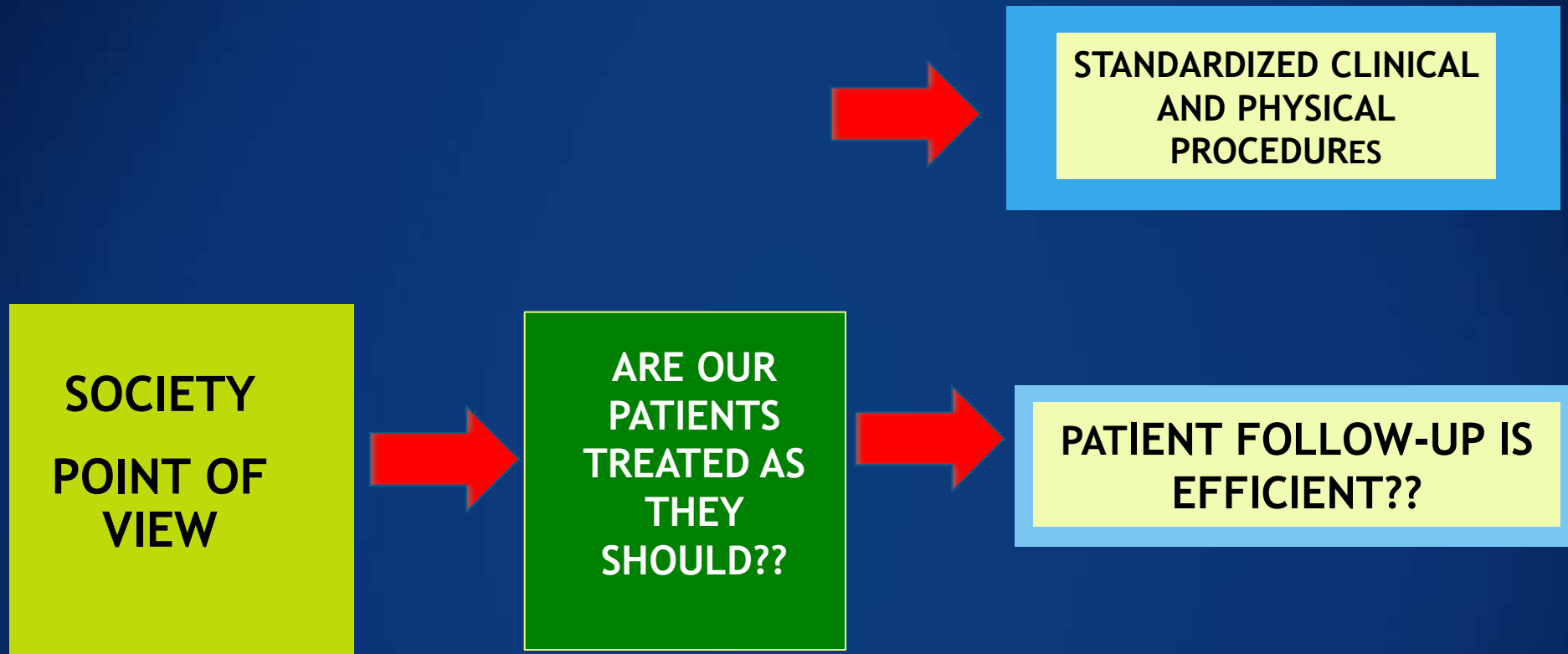
**SOCIETY  
POINT OF  
VIEW**

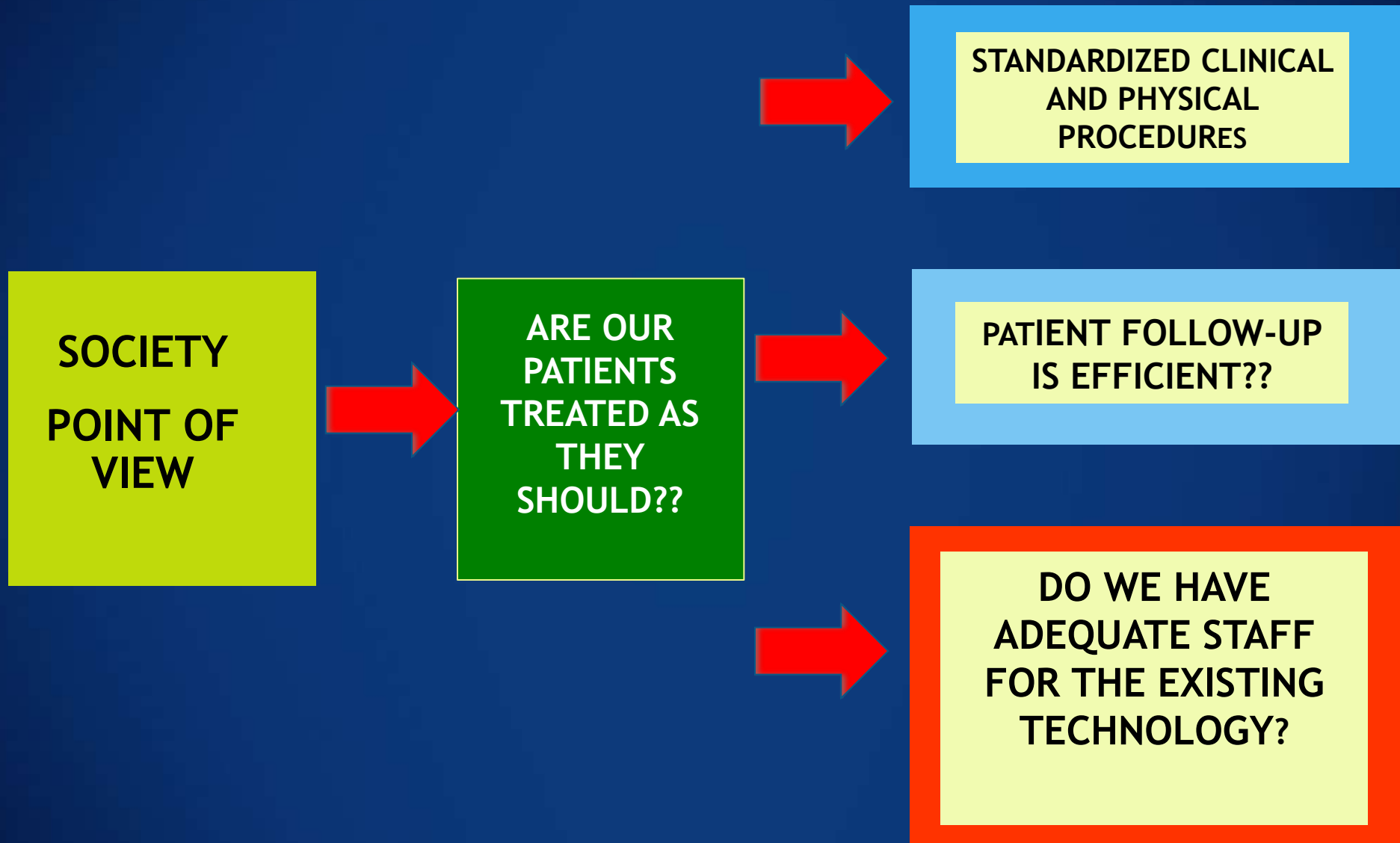


**ARE OUR  
PATIENTS  
TREATED AS  
THEY  
SHOULD??**



**STANDARDIZED CLINICAL  
AND PHYSICAL  
PROCEDURES**

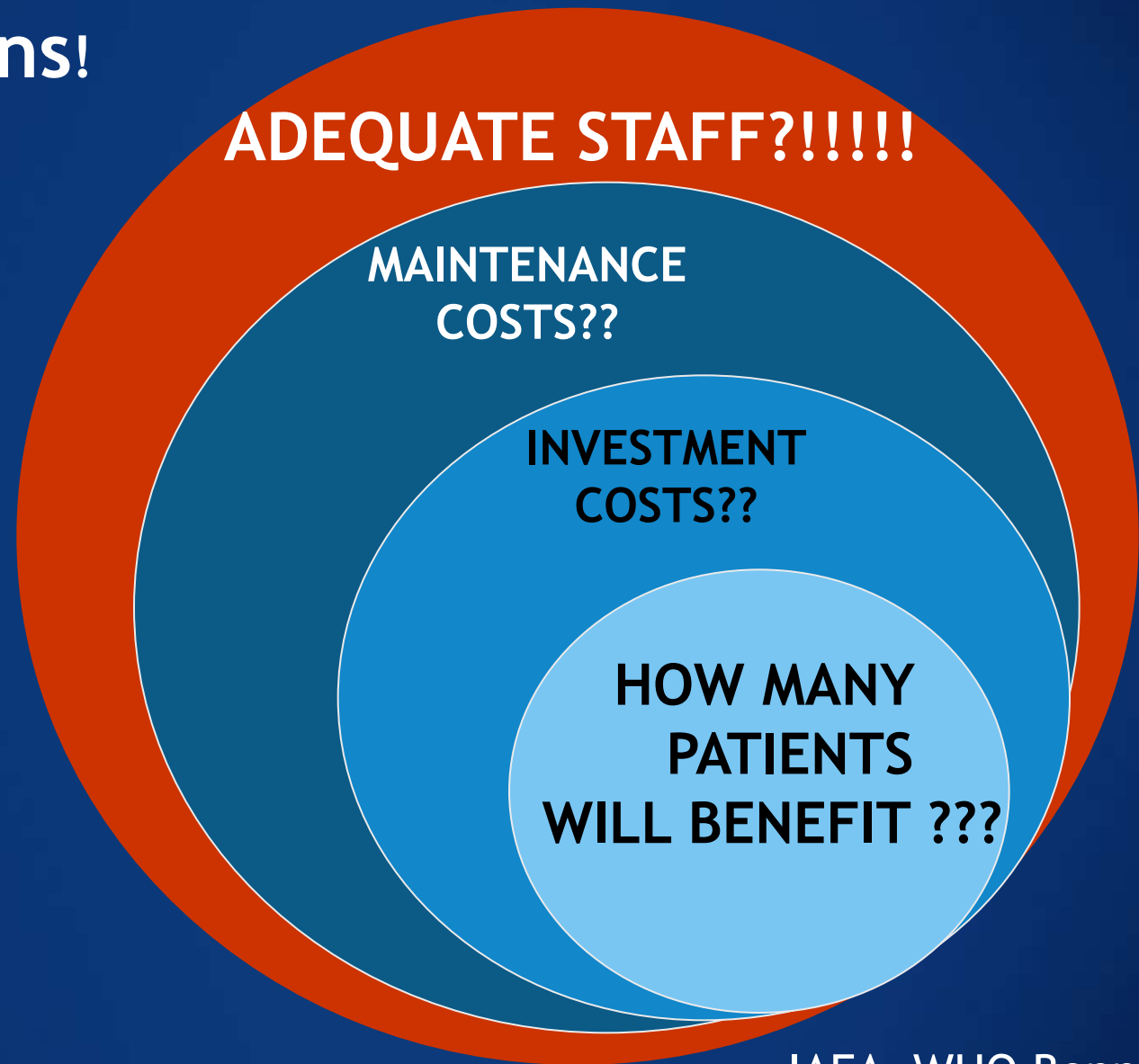




Matching technology with  
health care one must  
consider the

**The Cost-Benefit**  
aspects involved.

# Some of the cost-benefit considerations!

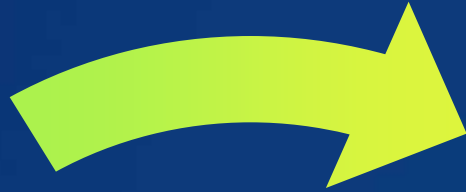


IAEA -WHO Bonn 2012

# HIGH TECHNOLOGY IMPLIES:

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HIGHER  
INITIAL  
COSTS

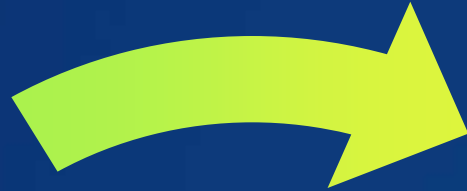




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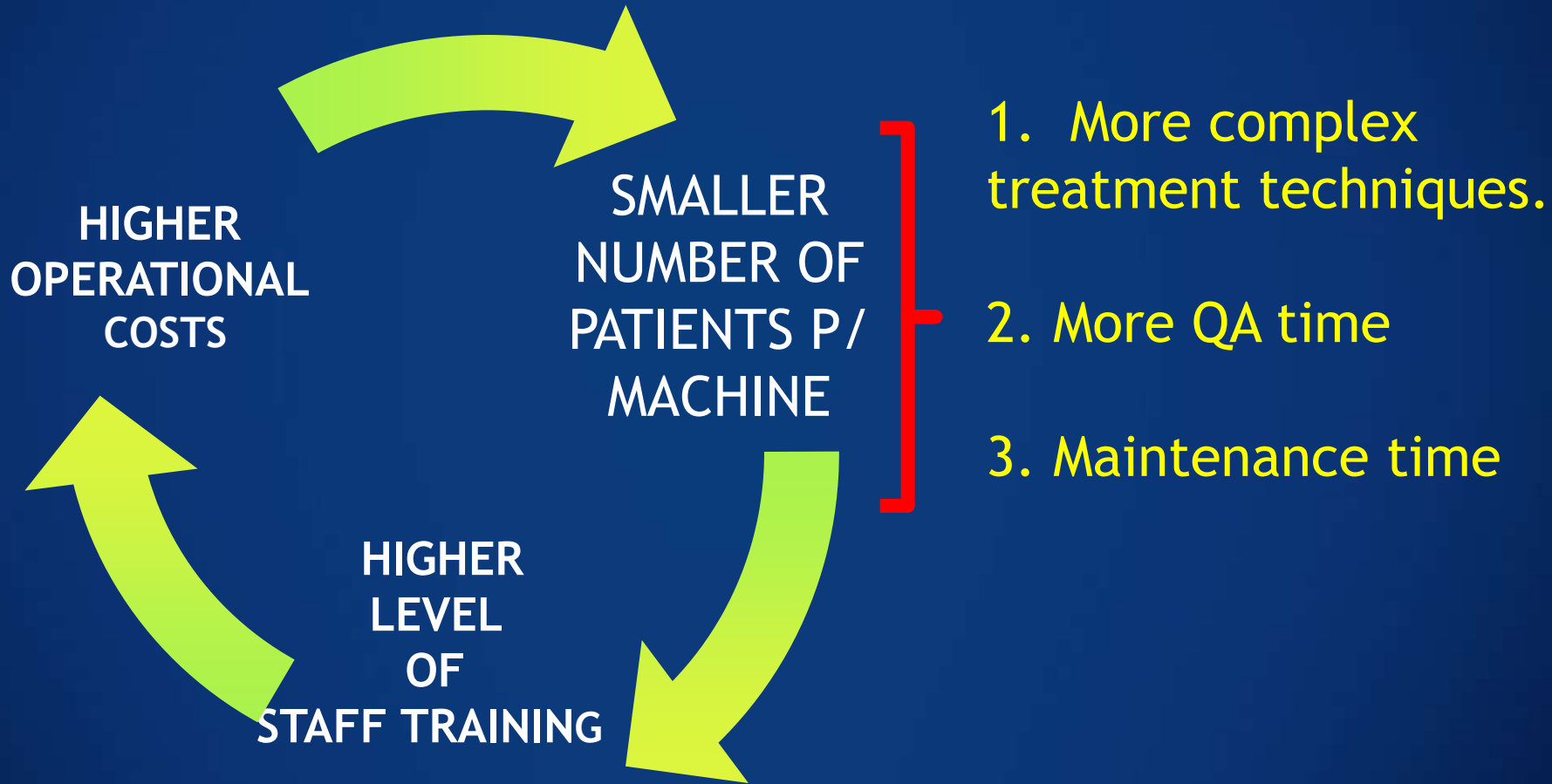
SMALLER  
NUMBER OF  
PATIENTS P/  
MACHINE



1. More complex treatment techniques.
2. More QA time
3. Maintenance time

# HIGH TECHNOLOGY IMPLIES:

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**KEY ISSUE!**



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How to answer the difficult  
question of much technology is  
needed to **correctly** treat our  
patients ???

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THERE IS NOT ONE SINGLE  
ANSWER !!!!!! BUT,

It is fair to say that Countries with limited resources must consider:

## Evidences of Real Benefits

in terms of the specific cancer **scenario** of each country.

# For simple scenarios:

- Good pilots + well organized and scientifically sounded procedures
- **MAY BE IN SOME CASES BETTER THAN** sophisticated technology!!



THANKS !!