Transformation and Change: Making a Complex System Safe and Right

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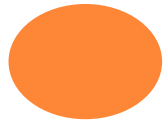
Transformation and Change
Making a Complex System Safe and Right

Outline

- The healthcare service as a complex system
- Problems associated with complex systems
- Making a complex system safe and right
  - How to eliminate the risks
  - Transformation and Change
- Conclusion



Transformation and Change: Making a Complex System Safe and Right

- The healthcare service is a complex system rather than a complicated system

Transformation and Change
Making a Complex System Safe and Right

The complexity

- Variation in patient
- No two patients are the same
- Multisystem involvement
- An array of differential diagnosis

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Making a Complex System Safe and Right

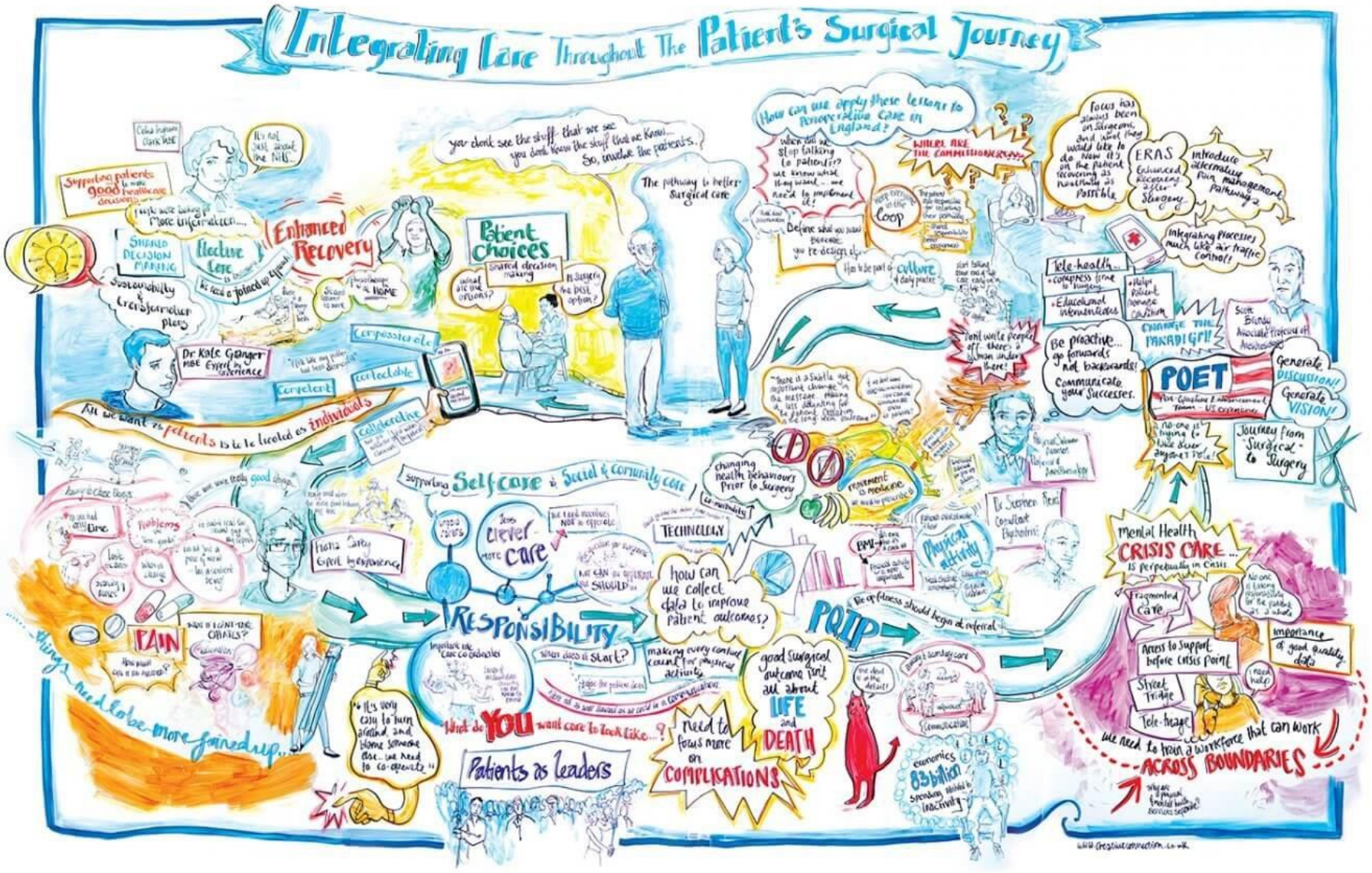
The complexity

- Complex journey to diagnosis and treatment
  - Imaging, laboratory
- Different treatment options
- Personnel of varying skills and expertise
  - Different personnel at each visit
- Consideration of cost-benefit

Transformation and Change: Making a Complex System Safe and Right

- A common feature in this complex system is the human
- You cannot predict what will happen in a complex system and that increases the risks within the service
- The complexity and human factor involvement makes the health system a high risk service

The Patient's Journey



The Patient's Journey

Medical Errors

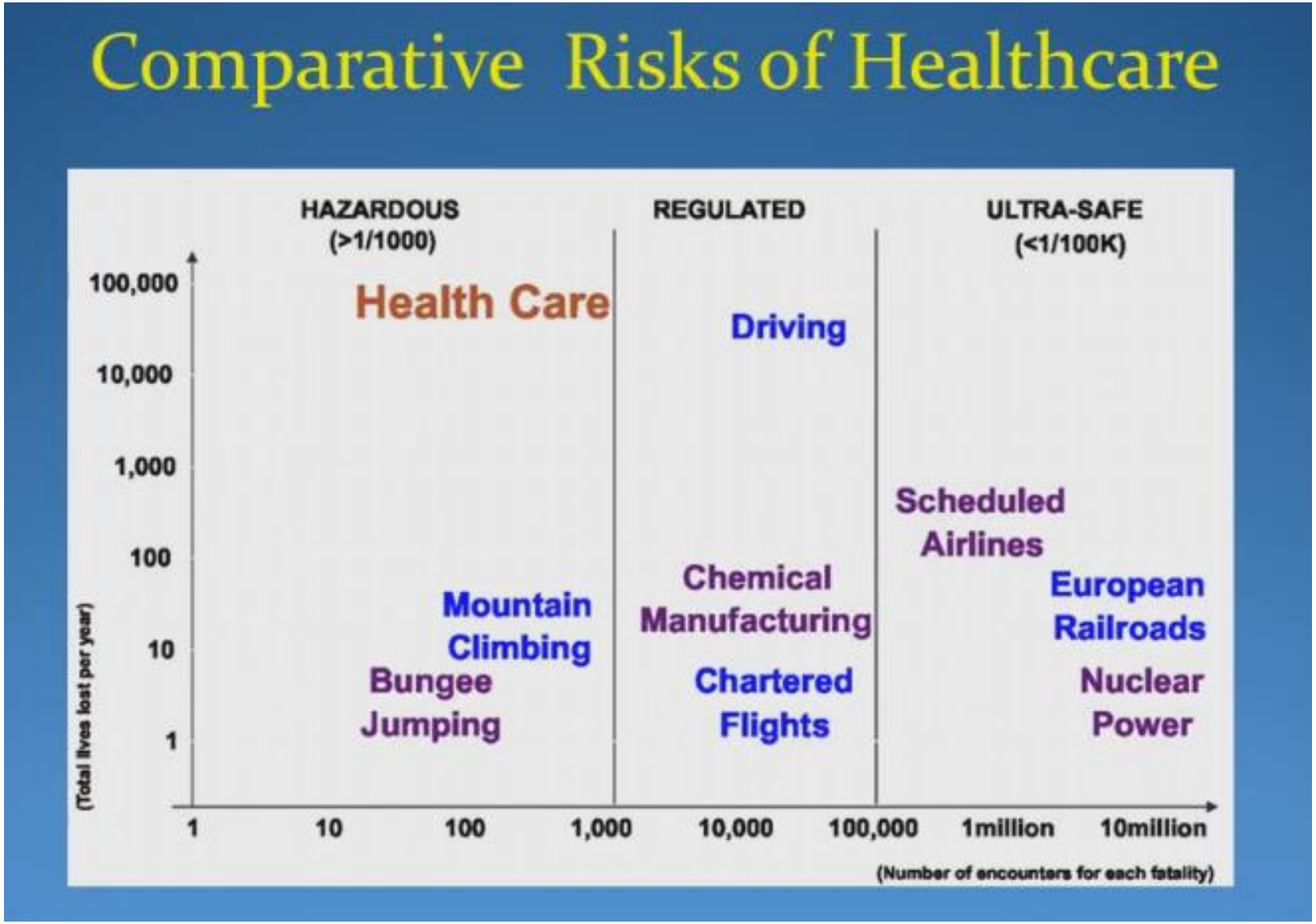
Human errors and human factors are causes of accidents in a complex system

Third commonest cause of death in America

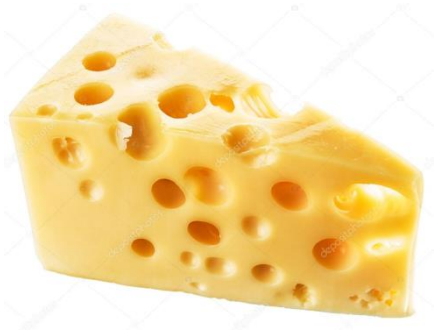
For lack of data, the rate in Nigeria is open to our imagination

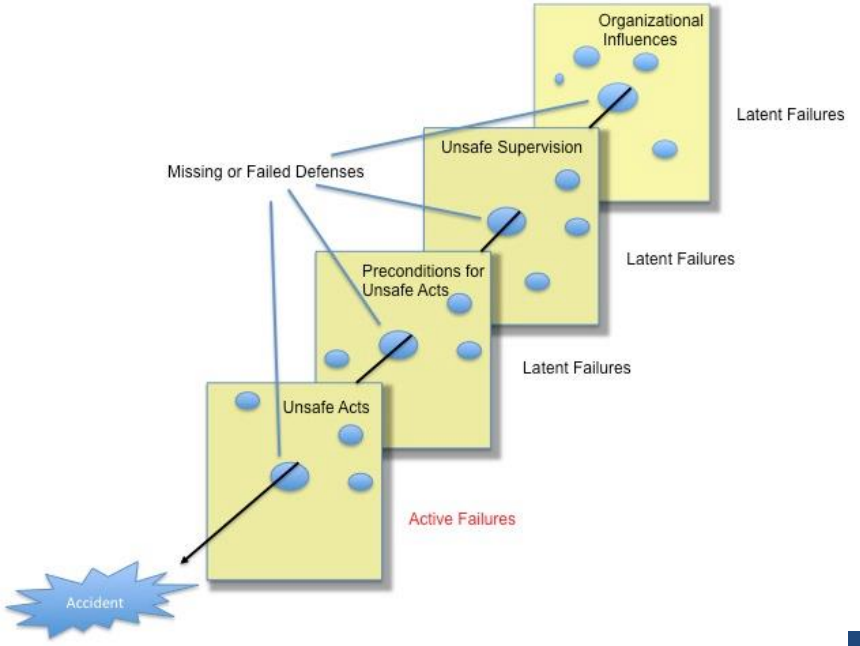
HEALTHCARE AS A HIGH RISK SYSTEM

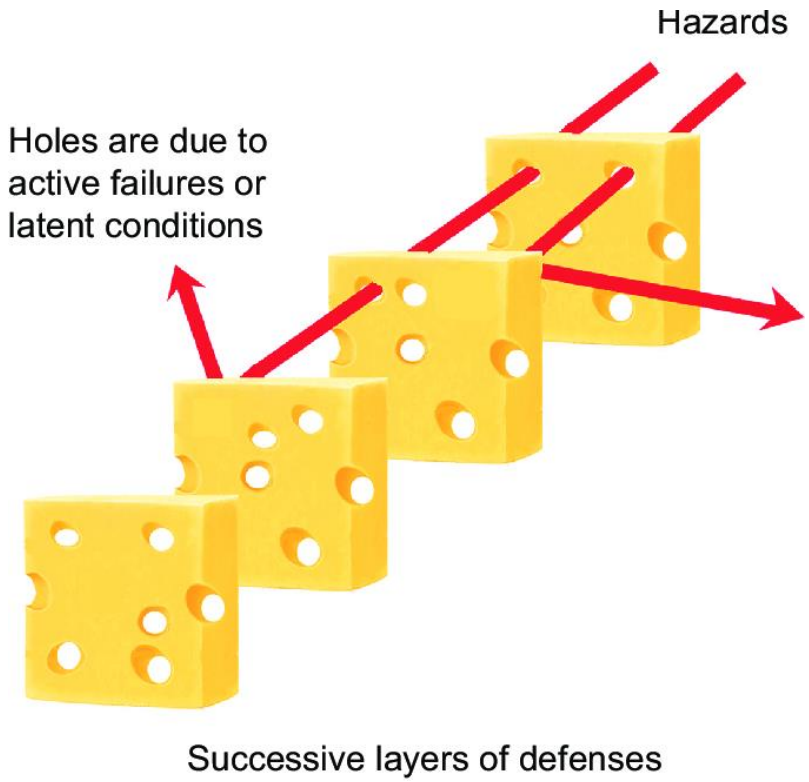
Medical Care is not a safe



Complex System – Components (James Reason)







Making a Complex System Safe and Right

- Complex systems are driven by the quality of the interactions between the parts, not only the quality of the parts
- Working on discrete parts or processes can impair or impede the performance at a system level
- Never fiddle with a part unless it also improves the system

(@CompleWales)

- **Transform and Change**

Complex System - Components

- Personnel
- Clinical Records
- Laboratory Services
- Imaging
- These are component parts and a fault in one can result in harm

The Patient's Journey – Making it safe and Right

Our objective

Making a Complex System Safe and Right

Making a complex system safe and right

- It takes time to define the problems
  - Observe – the role of Internal audit and Internal Compliance Assessments

- It also takes time to effect change
  - Effecting change through Quality Improvement is stepwise
  - **Plan – Do – Study – Act Cycle**
    - Multiple PDSA

Making the healthcare system safe and right

- **What are we trying to achieve?**
  - Effective, Efficient and harm-free healthcare system

- A pragmatic approach is required as we can't blow up the whole system and begin again and expect a favourable outcome

Making the health system safe

- What you do not know, you cannot plan to transform or change
- The importance of data collection and analysis
- Incident Reporting and Investigation – high reporting industries
  - Root Cause Analysis
  - Learning from Incidents
    - No blame and Fair blame culture
- Focus on problems that cause concern and effect change

Making a complex system safe and right

- **Understand why accidents happen**
  - **Human Factors**
    - Assumptions, Heroism, Burnout
  - **Service design**
    - Nacl and KCl
    - Cannula design
    - Interoperability of electronic machines
- **Find out what mistakes are happening**
    - Incident Reporting and Trend Analysis

Making a complex system safe and right

Change our systems to make it

- Harder to do the wrong thing
  - Use of Clinical Guidelines
  - Effective Handover - **SBAR**

- Easier to do the right thing
  - Provision of hand gel at the point of use
  - Patient Identification Label

How to change the healthcare system

- The current political mantra is change

- The quest for improved healthcare services requires change as well

- Effective change will require
  - thinking outside the box
  - a clear understanding of the complex health system and restructuring

Making the healthcare system safe and right

- Our current system lacks adequate policies and clinical guidelines
- It is necessary to introduce and embed of policies, guidelines
- It eliminates variations

Making the healthcare system safe and right

The Competence of the Care Providers

Maintaining and Upskilling

- Continuous Professional Development – KSP
- Personal Development Plan
- Collaboration through Global Health Linkages
- Research, Travels – Conferences, Self-development

Making the healthcare system safe and right

- Benchmarking
- External Scrutiny
  - Inspection
  - Openness – Performance Dashboard

Making the healthcare system safe and right

- **Regulatory Control**
  - Accreditation of services and facilities
    - **SQHN**
  - Accreditation of Personnel
    - MDCN, PSN, NMC

Making the healthcare system right

- Patients are human and deserve to be treated as such
- Patient Experience is important
  - Communication
  - Respect
  - Dignified Care
- Treat with Compassion
- Importance of Consent

Making the healthcare system safe and right

Examples of transformation, change and safety

- **The WHO Surgical Safety Checklist**
- **Infection Control**
  - Handwashing
  - Bare below elbow
- **Recognition of the Deteriorating Patient**
- **Simulation training** – multidisciplinary approach
- **Team working** is essential

Making the healthcare system safe and right

Examples of transformation, change and safety

- **The WHO Surgical Safety Checklist**
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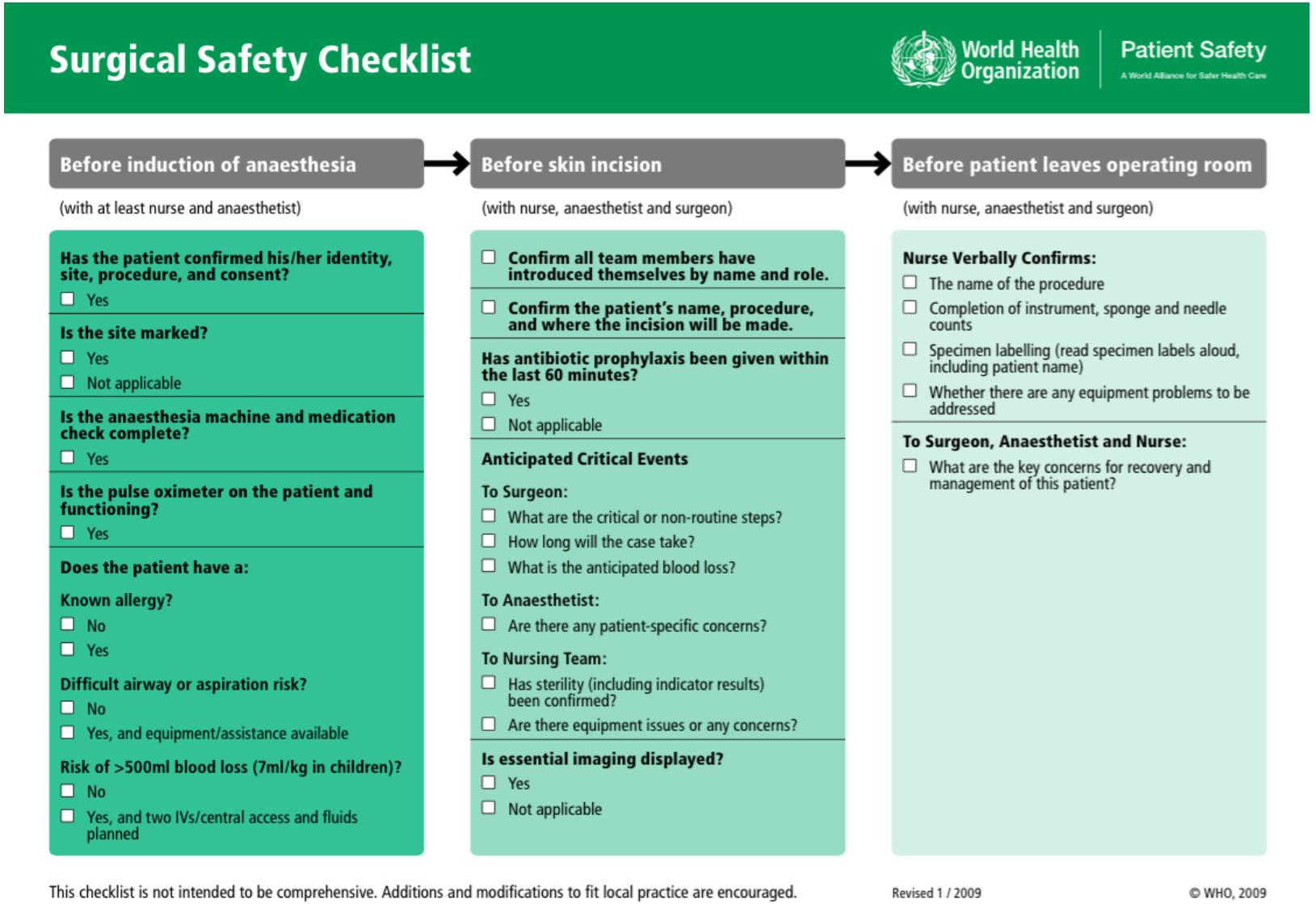
These interventions are simple and not capital intensive

Effective Handover – board rounds

WHO SURGICAL SAFETY CHECKLIST



Surgical Safety Checklist

World Health Organization | Patient Safety
A World Alliance for Safer Health Care

Before induction of anaesthesia

(with at least nurse and anaesthetist)

Has the patient confirmed his/her identity, site, procedure, and consent?
- ☐ Yes

Is the site marked?
- ☐ Yes
- ☐ Not applicable

Is the anaesthesia machine and medication check complete?
- ☐ Yes

Is the pulse oximeter on the patient and functioning?
- ☐ Yes

Does the patient have a:

Known allergy?
- ☐ No
- ☐ Yes

Difficult airway or aspiration risk?
- ☐ No
- ☐ Yes, and equipment/assistance available

Risk of >500ml blood loss (7ml/kg in children)?
- ☐ No
- ☐ Yes, and two IVs/central access and fluids planned

Before skin incision

(with nurse, anaesthetist and surgeon)

- ☐ **Confirm all team members have introduced themselves by name and role.**
- ☐ **Confirm the patient's name, procedure, and where the incision will be made.**

Has antibiotic prophylaxis been given within the last 60 minutes?
- ☐ Yes
- ☐ Not applicable

Anticipated Critical Events

To Surgeon:
- ☐ What are the critical or non-routine steps?
- ☐ How long will the case take?
- ☐ What is the anticipated blood loss?

To Anaesthetist:
- ☐ Are there any patient-specific concerns?

To Nursing Team:
- ☐ Has sterility (including indicator results) been confirmed?
- ☐ Are there equipment issues or any concerns?

Is essential imaging displayed?
- ☐ Yes
- ☐ Not applicable

Before patient leaves operating room

(with nurse, anaesthetist and surgeon)

Nurse Verbally Confirms:
- ☐ The name of the procedure
- ☐ Completion of instrument, sponge and needle counts
- ☐ Specimen labelling (read specimen labels aloud, including patient name)
- ☐ Whether there are any equipment problems to be addressed

To Surgeon, Anaesthetist and Nurse:
- ☐ What are the key concerns for recovery and management of this patient?

This checklist is not intended to be comprehensive. Additions and modifications to fit local practice are encouraged.

Revised 1 / 2009

How to transform the healthcare system

- **Innovation, Transformation and Change**
  - Doing the same thing within the old system will be more of the same
  - Trying changes within a failed system will not lead to transformation

- **Innovation is essential for Transformation and Change**
  - We might still be struggling with the fundamentals
  - Should not deter us from investing in technology

How to transform the healthcare system

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Examples

- Adapted motorbikes for hard to reach areas
- Use of drones to deliver medicinal and transfusion products
- Mobile Phone technology
  - BP, Blood Sugar monitoring
  - Tele-imaging, Tele-dermatology

How to transform the healthcare system

- Set clear goals – by 2021, we will **xxxxxxx**
- Changing the Culture of the organisation
  - Attitude
  - Communication
  - Non-Technical Skills
- Leadership by example (Board to Shop Floor)
- Accountability
- Performance Management

Medical Errors can be reduced if we do the right things and practice safely

Human errors and human factors are causes of accidents in a complex system

Third commonest cause of death

How to transform the healthcare system

The Future is here

- Artificial Intelligence
- Robotic Surgery
- Virtual Reality
- Personalised Medicine (Genomics)

How to transform the healthcare system

The Future is here

- Funding

- Political Will

Transformation and Change
Making a Complex System Safe and Right

Summary

- The healthcare service as a complex system
- Problems associated with complex systems
- Making a complex system safe and right
  - Eliminate the risks
  - Transformation and Change the service

Conclusion

- Documentation, Documentation, Documentation
- Effective Communication
- Data to drive Safety
- Innovation
- Patient involvement and Patient Empowerment play important parts in Patient Safety

Conclusion

- Patient Safety is at the core of our business and no patient should come to harm while under our care
- Adherence to Standard Operating Procedures (**Checklist, Guidelines**) prevents patient safety incidents/harm
- Patient involvement and Patient Empowerment

play important parts in Patient Safety

- Learning from clinical adverse events is essential

Each Nigerian Life is Priceless


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Thank you