

Week 5

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Module: Mental Health in the Community

Week 5: Implementation in Health Care

**Topic 1: Introduction to Implementation
Science (Part 1 of 3)**

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Learning outcomes

- Understand the need for a science of implementation.
- Be able to define implementation science.
- Be able to articulate the main differences between clinical and implementation studies.
- Have an overview of the scope and growth of the field.
- Be familiar with key concepts that you will study in detail in subsequent lectures.

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Part 1

Part 2

Part 3



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Lecture overview



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Mid-lecture question

Please note that this lecture contains a reflective question which will appear as an automatic pop-up on slide 11.

This question is not marked and does not count towards an overall grade.

It is simply intended as a point of reflection on the topic discussed.

Once you have written your short reflective question press 'Save'. At this point the lecture video will automatically resume.

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Surgical care



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The goal: Safe surgical care

Rutherford, 2012; Lloyd-Sherlock et al., 2012

Increasing volume of surgery:

- 4.7 million per year in NHS
- 243.2 million globally

Ageing population (65 years +):

- in Europe 1/6 people
- in UK 23% increase to 12.7 million people by 2018 (16.9 million in 2035) (Rutherford, 2012)

Co-morbidity:

- 2.6 conditions (65-84 years)
- 3.6 conditions (85+ years) (Lloyd-Sherlock et al., 2012)

Increasing societal pressure:

- To improve safety and quality of care.



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The story of the WHO surgical checklist

WHO, 2009

Surgical Safety Checklist

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

Revised 1 / 2009 © WHO, 2009

Before induction of anaesthesia (with at least nurse and anaesthetist)

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

Yes
 Yes
 Not applicable

Is the site marked?

Yes
 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 Anesthetist:
 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, Anesthetist and Nurse:

What are the key concerns for recovery and management of this patient?

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The first study

Haynes et al., 2009



A surgical safety checklist to reduce morbidity and mortality in a global population
(Haynes et al., 2009)



Findings:

- Major complication rate decreased 36%
- Mortality decreased 47%
- Post-op infection decreased 48%



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Reflective question

WHO, 2009

Why do you think this checklist was found to be so effective?

Download the pdf version of the document below located on KEATS to take a closer look.



Type your answer in the short answer panel which will appear shortly on this slide. Then click 'save' to continue.

Surgical Safety Checklist

World Health Organization Patient Safety

Before induction of anaesthesia (with at least nurse and anaesthetist)

Is the patient confirmed his/her identity, site, procedure, and consent? Yes No Not applicable

Is the site marked? Yes No Not applicable

Is the anaesthesia machine and medication check complete? Yes No

Is the pulse oximeter on the patient and functioning? Yes No

Does the patient have a: Known allergy? Yes No Not applicable Difficult airway or aspiration risk? Yes No Not applicable Risk of >500ml blood loss (7 ml/kg in children)? Yes No Not applicable

Before skin incision (with nurse, anaesthetist and surgeon)

Has the patient confirmed his/her identity, site, procedure, and consent? Yes No Not applicable

Has all team members introduced themselves by name and role? Yes No Not applicable

Confirm the patient's name, procedure, and site and that incision will be made. Has antibiotic prophylaxis been given within the last 60 minutes? Yes No Not applicable

Anticipated Critical Events To Surgeon: What are the critical or non-routine steps? How long will the case take? Will there be anticipated blood loss? To Anesthetist: Are there any patient-specific concerns? To Nursing Team: Has sterility (including indicator results) been maintained? Are there equipment issues or any concerns? Is essential imaging displayed? Yes No Not applicable

Nurse Verbality Conference: The name of the procedure Completion of instrument, sponge and needle count Specimen labeling (and specimen label aloud) Swabbing and counting instruments Who else has any equipment problems to be addressed

To Surgeon, Anesthetist 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.

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NHS surgical checklist

NHS National Patient Safety Agency, 2009

Within weeks of the publication in England:

- National policy
- All hospitals were asked to implement the checklist within 12 months
- Rate of implementation to be checked via audits and reported by risk-managers

WHO Surgical Safety Checklist
(adapted for England and Wales)

National Patient Safety Agency
National Reporting and Learning Service

SIGN IN (To be read out loud) Before induction of anaesthesia

Has the patient confirmed his/her identity, site, procedure and consent? Yes No Not applicable

Is the surgical site marked? Yes No Not applicable

Is the anaesthesia machine and medication check complete? Yes No Not applicable

Does the patient have a: Known allergy? Yes No Not applicable Difficult airway/aspiration risk? Yes No Not applicable Risk of >500 ml blood loss (7 ml/kg in children)? Yes No Not applicable

TIME OUT (To be read out loud) Before start of surgical intervention (for example, skin incision)

Have all team members introduced themselves by name and role? Yes No Not applicable

Surgeon, Anesthetist and Registered Practitioner verbally confirm:
What is the patient's name?
What operator, site and position are planned?

Anticipated critical events Aspirator: How much blood loss is anticipated? Are there any specific equipment requirements? Are there any critical or unexpected steps you would like to highlight? Anesthetist: Does the patient have any patient specific concerns? What is the patient's ASA grade? What monitoring equipment and other specific items are required, for example blood? Nurse/DO: Has the sterility of the instrumentation been confirmed (including indicator results)? Are there any equipment issues or concerns? Has the antibiotic prophylaxis been undertaken? Yes No Not applicable Antibiotic prophylaxis within the last 60 minutes • Anterior rhinoplasty • Hair removal • Ovarian cystic endometrioma Has the skin been prepared? Yes No Not applicable Is essential imaging displayed? Yes No Not applicable

SIGN OUT (To be read out loud) Before any member of the team leaves the operating room

Registered Practitioner verbally confirms with the team:
Has the patient been recorded? Has it been confirmed that instruments, swabs and equipment are accounted for? Have the specimens been labelled (including patient name)? Have any equipment problems been identified that need to be addressed?

Surgeon, Anesthetist and Registered Practitioner: What are the key concerns for recovery and management of this patient?

This checklist contains the core content for England and Wales

www.npsa.nhs.uk/nrls

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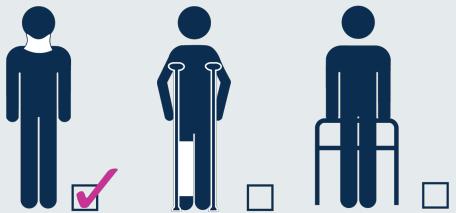
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Further RCT evidence

Haugen et al., 2015



Effect of the World Health Organization checklist on patient outcomes: a stepped wedge cluster randomized controlled trial
(Haugen et al., 2015)



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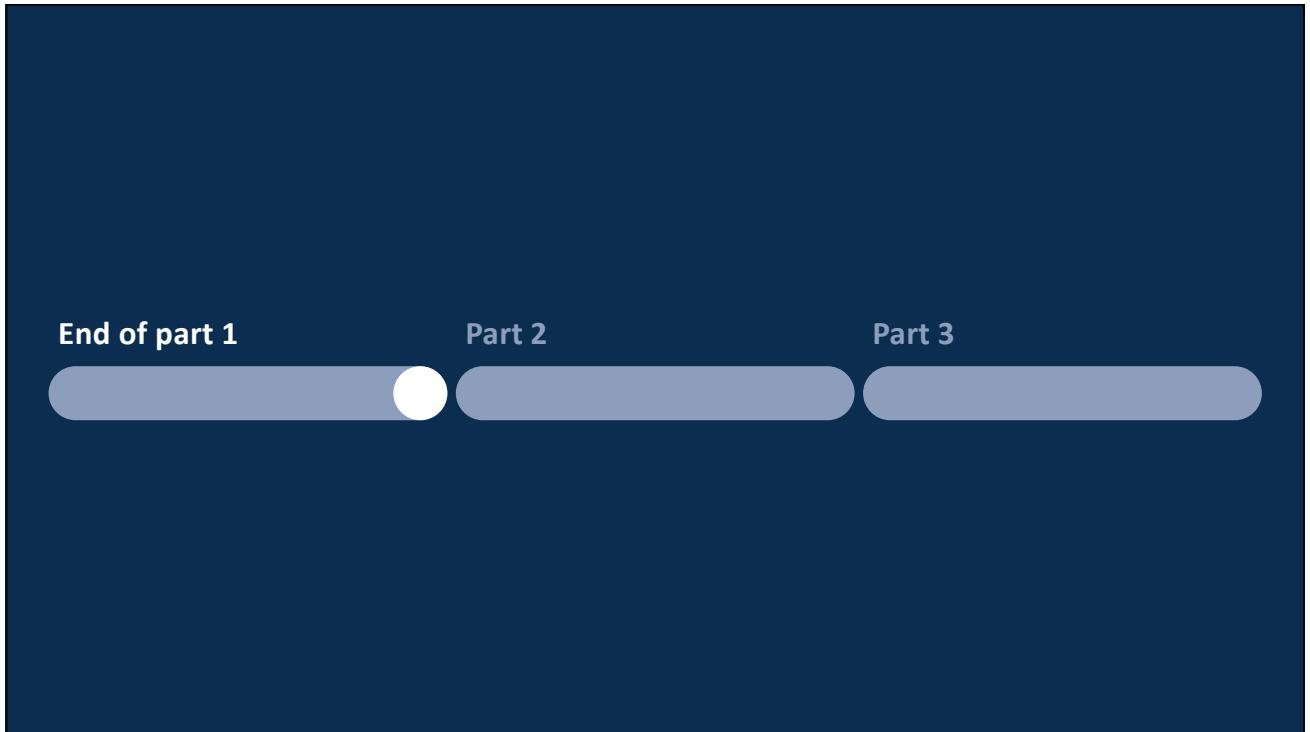
Summary of part 1

- The use of surgical checklists is an example of how research evidence can be translated into clinical and national policy.
- Implementation science aims to take us from research to real life settings and to accelerate research uptake into services.

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