Hi…

Department of Medicine
Med 442 Course Virtual Lectures

جامعة الملك سعود
King Saud University
University Medical City

Patient Safety & Quality Improvement:
Principles, Tips and Tools

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Intended Learning Outcomes:

At the end of this lecture student will be able to:

1) List the six domains of quality patient care
2) Define the six domains of Safety Competencies Framework
3) Recognize the complexity of the Contemporary Healthcare System
4) Discuss the seven elements of the Culture of Safety
5) Define the five principles of quality improvement project

What is Quality?
What is Patient Safety?


الجودة من الإتقان إلى الإحسان
إدارة التربية والتعليم بمحافظة الباطنة

وردت عبارة (أحسن عملاً) في القرآن الكريم أربع مرات:

﴿وَهُوَ الَّذِي خَلَقَ السَّمَاوَاتِ وَالأَرْضَ فِي سِتَّةِ أَيَّامٍ وَكَانَ عَرْشُهُ عَلَى الْمَاء لِيَبْلُوَكُمْ أَيُّكُمْ أَحْسَنُ عَمَلاً﴾ [هود:7]

﴿إِنَّا جَعَلْنَا مَا عَلَى الْأَرْضِ زِينَةً لَّهَا لِنَبْلُوَهُمْ أَيُّهُمْ أَحْسَنُ عَمَلًا﴾ [الكهف:7]

﴿إِنَّ الَّذِينَ آمَنُوا وَعَمِلُوا الصَّالِحَاتِ إِنَّا لَا نُضِيعُ أَجْرَ مَنْ أَحْسَنَ عَمَلًا﴾ [الكهف:30]

﴿الَّذِي خَلَقَ الْمَوْتَ وَالْحَيَاةَ لِيَبْلُوَكُمْ أَيُّكُمْ أَحْسَنُ عَمَلًا﴾ [الملك:2]

COVID-19….

- ***What have you learned from it?***

People, Patient & Staff Safety First

COVID-19….

- ✓ Commitment
- ✓ Opportunities
- ✓ Values
- ✓ Interdependence
- ✓ Determination

COVID-19….

✓ *What do we have this lecture today?*

Mrs Nourah…

- ✓A 59 y/o F presented to ER with dizziness and nosebleed x 1 day
- ✓Discharged 2 days ago after tx for ADHF
- ✓PMHx: A Fib, ICMP, DM, DLP, HTN, CKD
- ✓Meds: Bisoprolol, Lisinopril, Furosemide, Simvastatin, Warfarin
- ✓VS: 94/62-118-98% RA
- ✓No JVD, no crackles, no leg edema
- ✓***What is your DDX?***

MEDICATION WITHOUT HARM
Global Patient Safety Challenge

World Health Organization

5 Moments for Medication Safety

Starting a medication

- What is the name of this medication and what is it for?
- What are the risks and possible side-effects?
- Is there another way of treating my condition?
- Have I told my health professional about my allergies and other health conditions?
- How should I store this medication?

Taking my medication

- When should I take this medication and how much should I take each time?
- How should I take the medication?
- Is there anything related to food and drink that I should know while taking this medication?
- What should I do if I miss a dose of this medication?
- What should I do if I have side-effects?

Adding a medication

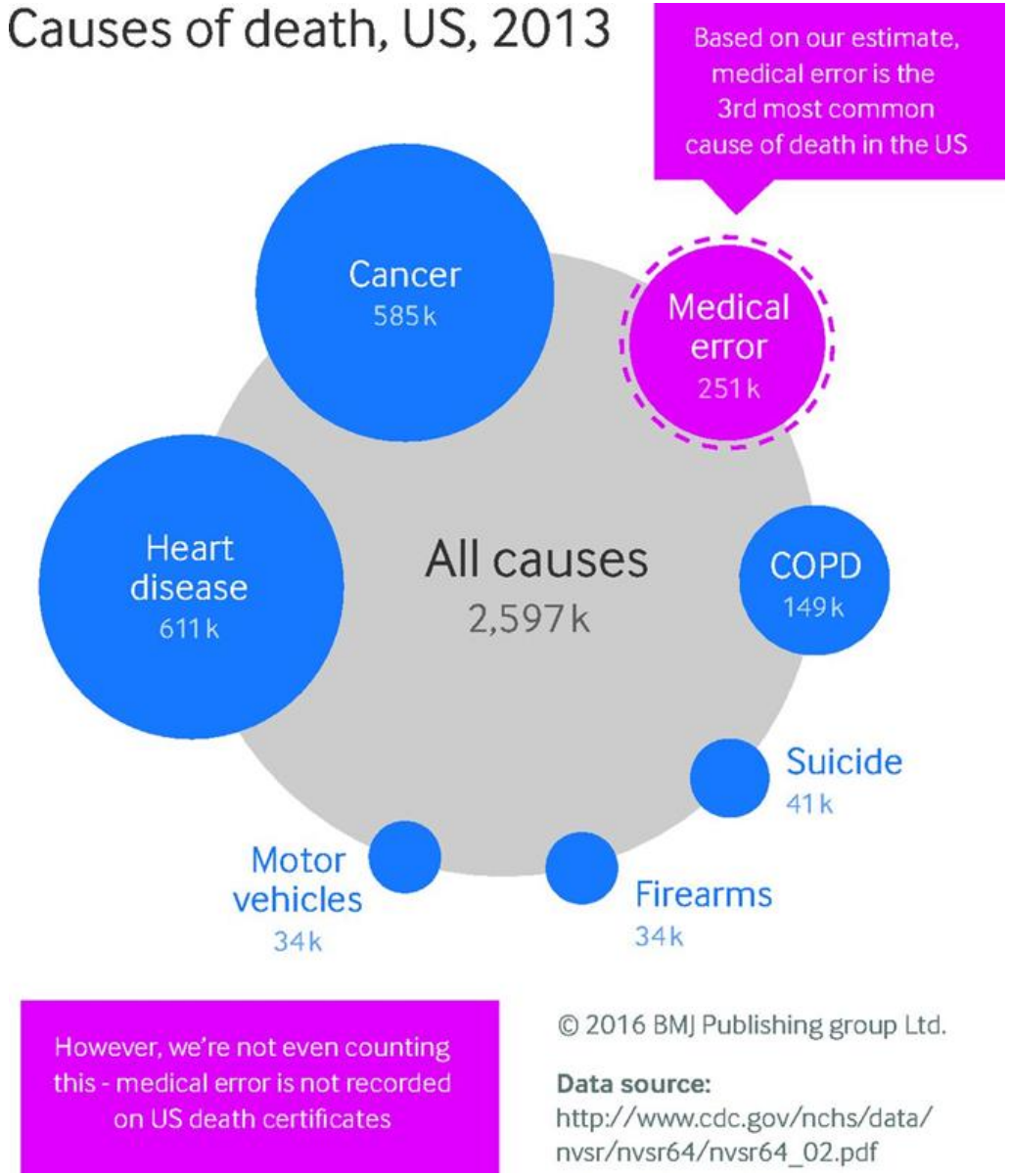
- Do I really need any other medication?
- Have I told my health professional about the medications I am already taking?
- Can this medication interact with my other medications?
- What should I do if I suspect an interaction?
- Will I be able to manage multiple medications correctly?

Reviewing my medications

- Do I keep a list of all my medications?
- How long should I take each medication?
- Am I taking any medications I no longer need?
- Does a health professional check my medications regularly?
- How often should my medications be reviewed?

Stopping my medication

- When should I stop each medication?
- Should any of my medications not be stopped suddenly?
- What should I do if I run out of medication?
- If I have to stop my medication due to an unwanted effect, where should I report this?
- What should I do with leftover or expired medications?



Makary, M. & Daniel, M. (2016). **Medical error—the third leading cause of death in the US.** BMJ 2016;353:bmj.i2139

Institute of Medicine (IOM)

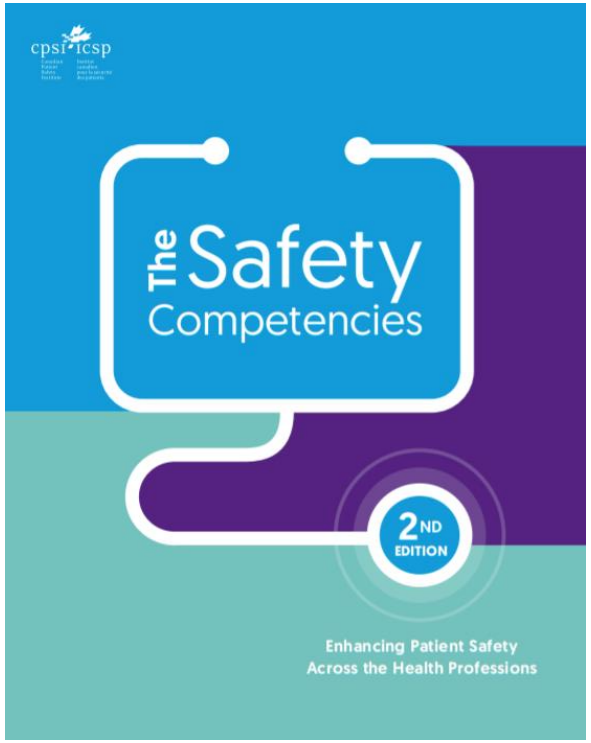
Washington, DC

1999: *To Err Is Human: Building a Safer Health System*

- an alarming report, tremendous public attention to the crisis of patient safety
- ~ **98,000** patients **die** every year from **preventable** medical errors in hospitals

2001: *Crossing the Quality Chasm: A New Health System for the 21st Century*

NATIONAL ACADEMY of MEDICINE



https://www.patientsafetyinstitute.ca/en/toolsresources/safetycompetencies/pages/default.aspx

Students Poll Questions

1	My training is preparing me to understand the causes of medical errors
2	My training is preparing me to prevent medical errors
3	I would feel comfortable reporting any errors I had made, no matter how serious the outcome had been for the patient
4	The number of hours doctors work increases the likelihood of making medical errors
5	Most medical errors result from careless doctors
6	Medical errors are a sign of incompetence
7	Doctors have a responsibility to disclose errors to patients only if they result in patient harm
8	Teaching teamwork skills will reduce medical errors
9	Encouraging patients to be more involved in their care can help to reduce the risk of medical errors occurring
10	Teaching students about patient safety should be an important priority in medical students training

Carruthers, S. et al. (2009). **Attitudes to patient safety amongst medical students and tutors: Developing a reliable and valid measure**, Medical Teacher, 31:8, e370-e376.

Speaking up for patient safety (3:30)

https://youtu.be/DCtGtpkdC1U

World Patient Safety Day 17 September 2020

اليوم العالمي لسلامة المرضى
١٧ أيلول \ سبتمبر ٢٠٢٠

سلامة الممارس الصحي هي أولوية لسلامة المرضى

Healthcare Worker Safety: A Priority for Patient Safety

https://www.spsc.gov.sa/English/News/Pages/news60.aspx

Topic 1: What is patient safety?

Topic 2: Why applying human factors is important for patient safety

Topic 3: Understanding systems and the effect of complexity on patient care

Topic 4: Being an effective team player

Topic 5: Learning from errors to prevent harm

Topic 6: Understanding and managing clinical risk

Topic 7: Using quality-improvement methods to improve care

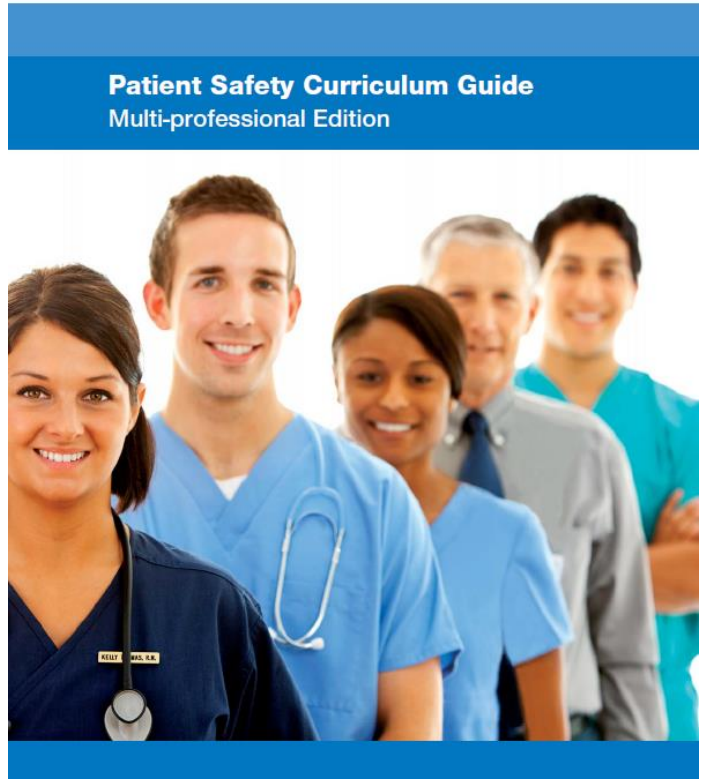
Topic 8: Engaging with patients and carers

Topic 9: Infection prevention and control

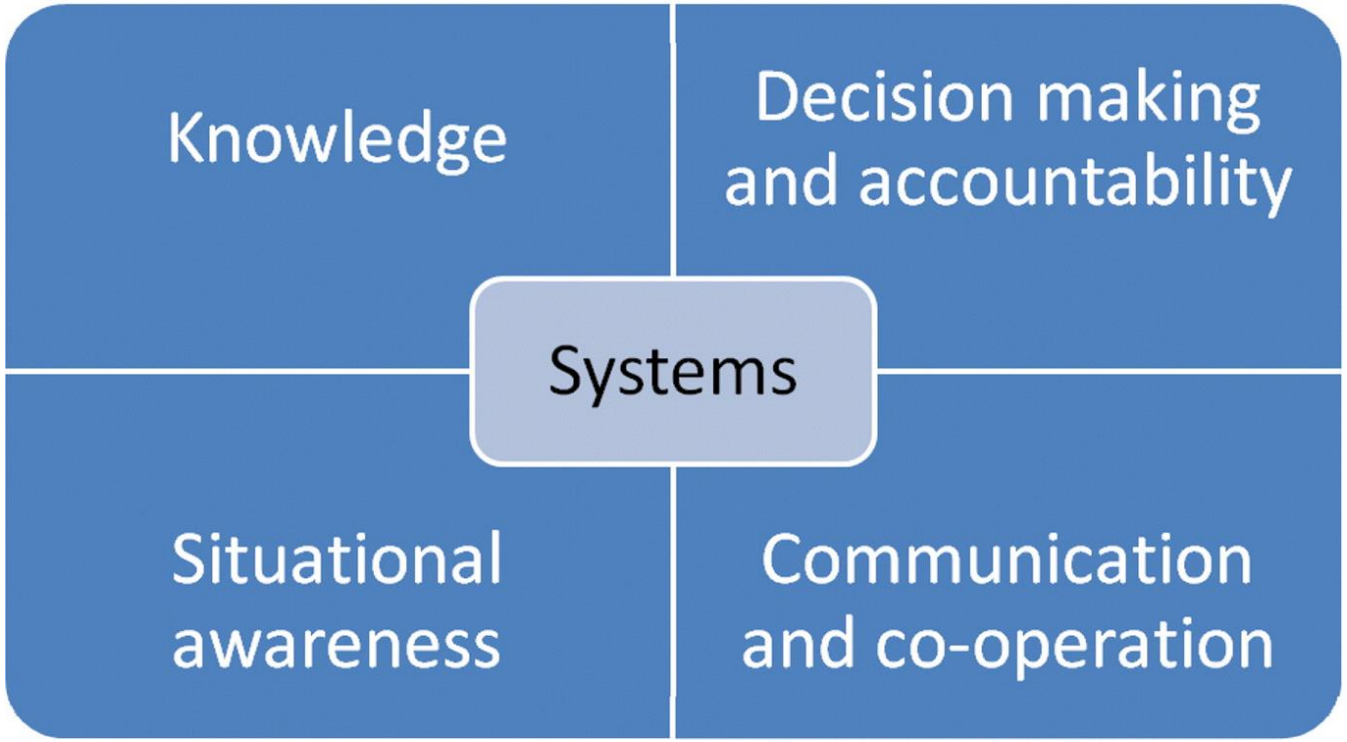
Topic 10: Patient safety and invasive procedures

Topic 11: Improving medication safety

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



Building blocks for patient safety in the Leeds undergraduate medical curriculum



Armitage, G., Cracknell, A., Forrest, K. & Sandars, J. (2011). **Twelve tips for implementing a patient safety curriculum in an undergraduate programme in medicine**, Medical Teacher, 33:7, 535-540.

Principles:

Principle # 1: Core Concepts

Principle # 2: Understanding Systems

Principle # 3: Opportunities to Improve Quality of Care

Principle # 4: Designing Improvement

Principle # 5: Developing Interventions

Narayanan, et al. (2018). **Twelve tips for teaching quality improvement in the clinical environment.** Medical Teacher, 40(10), 1060–1066.

Tips:

Tip # 1: The Six Domains of Health Care Quality

Tip # 2: The Challenges of Changing Systems, Culture, and Behavior

Tip # 3: Process Mapping

Tip # 4: Follow the Order

Tip # 5: Patient Care Outcomes

Tip # 6: Failure Mode Effect Analysis (Potential Errors)

Narayanan, et al. (2018). **Twelve tips for teaching quality improvement in the clinical environment.** Medical Teacher, 40(10), 1060–1066.

Tips:

Tip # 7: Root Cause Analysis (After an Error)

Tip # 8: Assessment Metrics

Tip # 9: Driver Diagrams

Tip # 10: SMART Aim Statement for QI Intervention

Tip # 11: Bedside Checklist

Tip # 12: Plan-Do-Study-Act (PDSA) Cycles

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Principle # 1: Core Concepts

Tip # 1: The Six Domains of Health Care Quality

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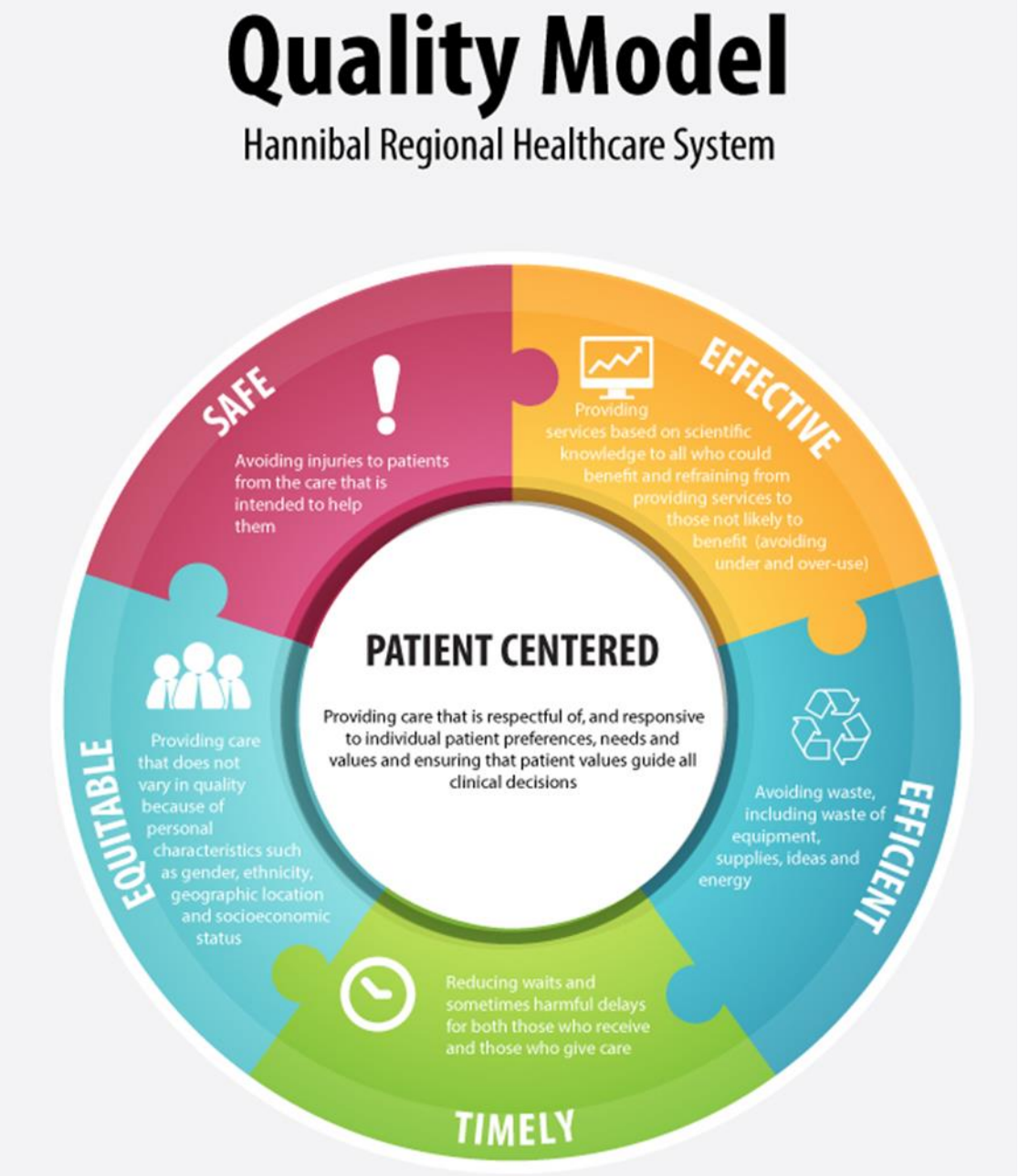

http://iv.hannibalhealth.org/tag/steeep/

Principle # 1: Core Concepts

Tip # 2: The Challenges of Changing Systems, Culture, and Behavior

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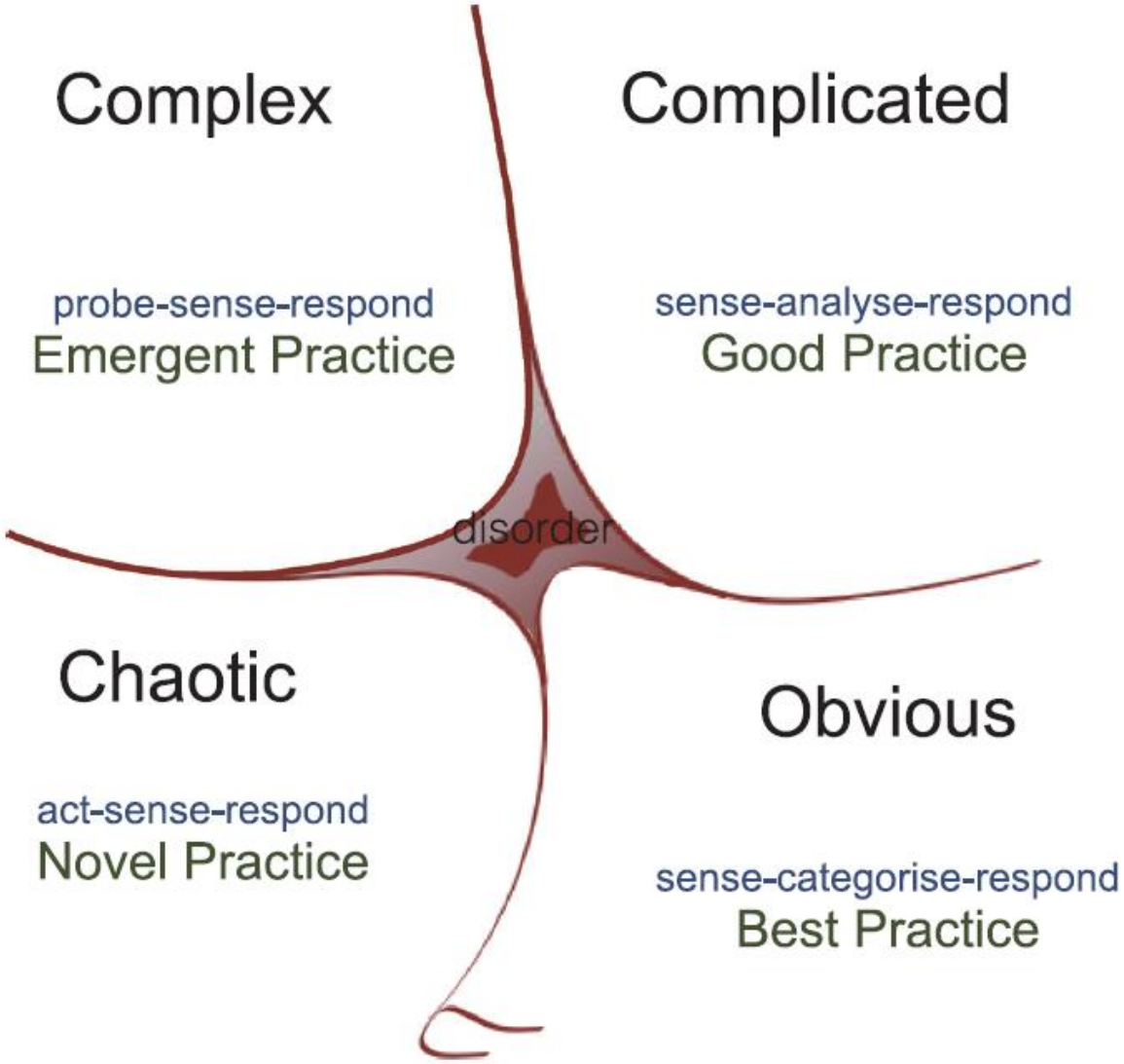
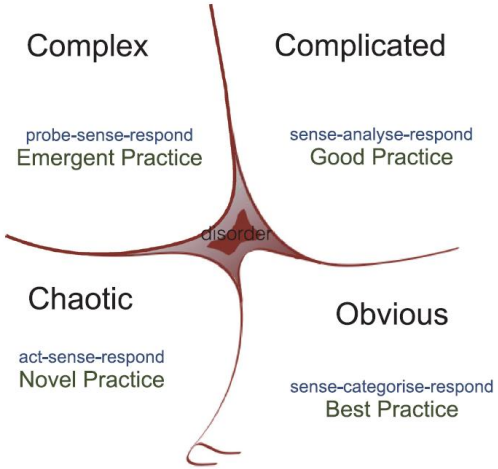


Gray Ben (2017). **The Cynefin framework: applying an understanding of complexity to medicine**. Journal of Primary Health Care 9, 258-261.



Type of problem	Predictability	Cause and effect?	Type of practice	Strategy
Obvious	Stable and predictable by all	Clear cause and effect	One right answer **Best Practice** Protocols essential	Sense Categorise Respond
Complicated	Stable and predictable by experts	Cause and effect discernible with analysis	Several right answers **Good Practice** Protocols helpful	Sense Analyse Respond
Complex	In flux and unpredictable	Cause and effect may be there but only understood in retrospect	No right answers **Emergent practice** Protocol unlikely to work	Probe Sense Respond
Chaotic	Turbulent	Situation too turbulent and changing to consider cause and effect	No time to search for answer **Act to gain control** Protocol no help	Act Sense Respond

Gray Ben (2017). **The Cynefin framework: applying an understanding of complexity to medicine**. Journal of Primary Health Care 9, 258-261.

What is a Culture?
And How to Change it?

Mossop, et al. (2013). **Analysing the hidden curriculum: use of a cultural web.** *Medical education*, *47*(2), 134–143.

Elements of a Culture of Safety

1) Acknowledge the high-risk nature of the activity
2) Establish safety as a key goal in policies and procedures
3) Evaluate errors as “system failures,” not as an individual’s failures
4) Commit needed resources, including time and technology
5) Recognize that a “safe” environment is not error free
6) Report “near misses” and events in blame- and retaliation-free environment
7) Develop processes for peer review and analysis of root cause

Garrick, R., Kliger, A. & Stefanchik, B. **Patient and Facility Safety in Hemodialysis: Opportunities and Strategies to Develop a Culture of Safety**. CJASN Apr 2012, 7 (4) 680-688.

Change Management: Key Features

1) Stating a clear goal or outcome
2) Having buy in from all stakeholders
3) Training or simulation opportunities
4) Communicating clearly
5) Providing opportunities for feedback

Narayanan, et al. (2018). **Twelve tips for teaching quality improvement in the clinical environment.** Medical Teacher, 40(10), 1060–1066.

Principle # 2: Understanding Systems

Tip # 3: Process Mapping

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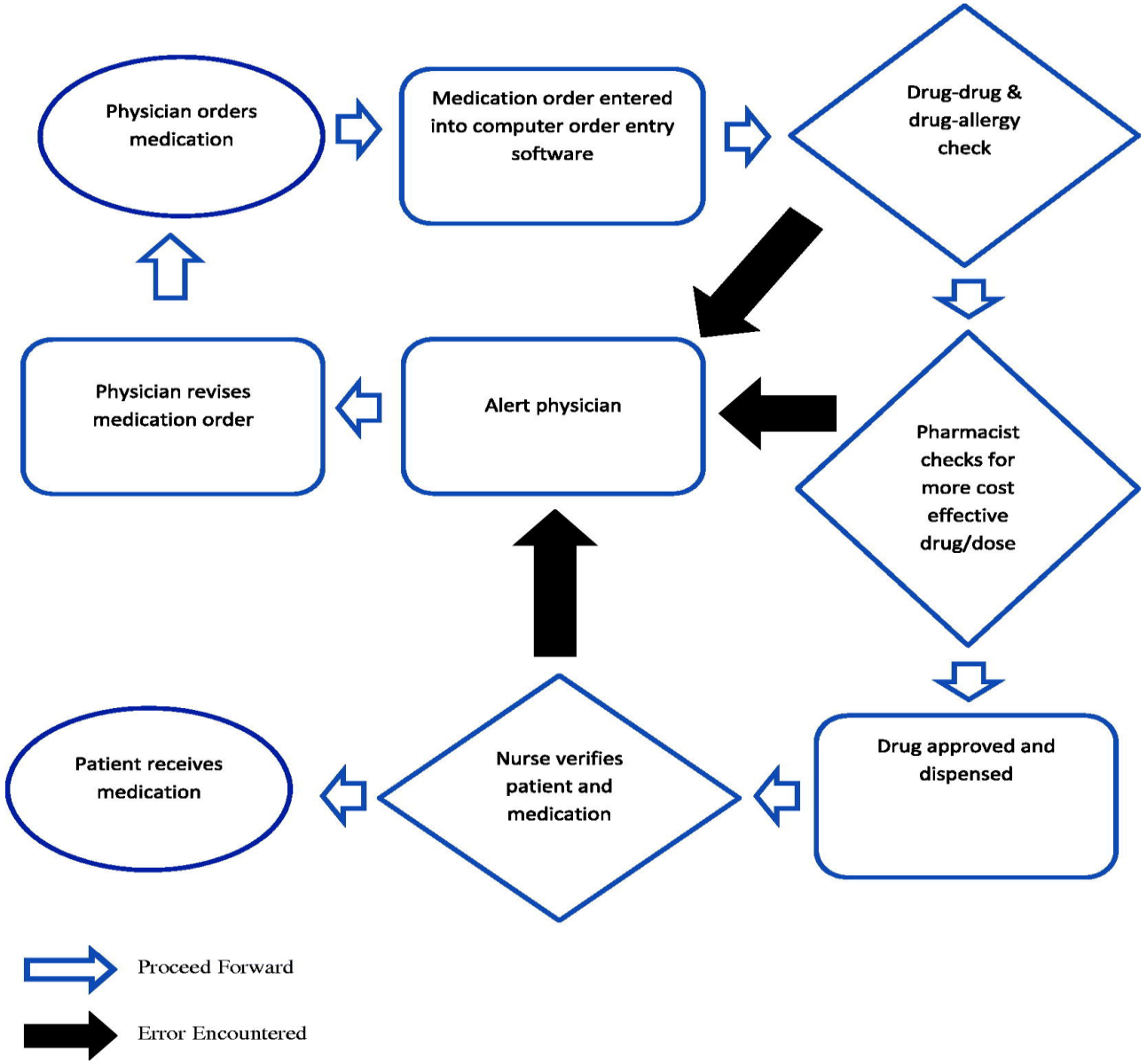
A **process map** is a step-by-step diagram that shows how resources and activities result in a specific outcome



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Principle # 2: Understanding Systems

Tip # 4: Follow the Order

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Tip # 4: Follow the Order

- ✓Compare theoretical process mapping (Tip 3) with the reality of clinical practice
- ✓Identify areas of complexity not captured by the diagram
- ✓Witness processes that may be error prone
- ✓Learn about healthcare systems by immersion in a process

Narayanan, et al. (2018). **Twelve tips for teaching quality improvement in the clinical environment.** Medical Teacher, 40(10), 1060–1066.

Principle # 3: Opportunities to Improve Quality of Care

Tip # 5: Patient Care Outcomes

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Tip # 5: Patient Care Outcomes

1. Readmissions (potentially preventable with better discharge planning)
2. Medication errors (incorrect medication, dose or route of administration)
3. Diagnostic errors (wrong test, ordering unnecessary labs)
4. Nosocomial infections

✓**Audit:** Problem + Standard + Care Process + Data + Analysis

Narayanan, et al. (2018). **Twelve tips for teaching quality improvement in the clinical environment.** Medical Teacher, 40(10), 1060–1066.

Principle # 3: Opportunities to Improve Quality of Care

Tip # 6: Failure Mode Effect Analysis (Potential Errors)

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Healthcare FMEA Criticality Matrix (Hazard Score)

Severity	Frequent (4)	Occasional (3)	Uncommon (2)	Remote (1)
Catastrophic (4)	16	12	8	4
Major (3)	12	9	6	3
Moderate (2)	8	6	4	2
Minor (1)	4	3	2	1

Probability

KEY

- Must Take Action
- Should Take Action
- No Action Required

www.quality-one.com

https://quality-one.com/hfmea/

Table 1. Example of failure mode effect analysis.

Process step	Failure mode	Effect of failure	Possible mitigation
Drug-drug interaction check	Inpatient takes home medications not dispensed by pharmacy.	Patient has side effect from medication.	Ask patients to turn over all home medications on admission.
Drug-allergy interaction check	New patient allergy undocumented.	Patient has allergic reaction to medication.	Require physician to update allergy history on admission.
Check medication dosage	Patient's creatinine not checked, thus renal function unknown.	Patient develops toxicity to medication.	For renally cleared medications, creatinine check is compulsory within the past 48 hours.
Nurse verifies timing for medication	Timing of previous dose of medication not documented.	Medication effect compounded by dose stacking.	Require nurse to document timing of previous dose before dispensing next dose.

Narayanan, et al. (2018). **Twelve tips for teaching quality improvement in the clinical environment.** Medical Teacher, 40(10), 1060–1066.

Principle # 3: Opportunities to Improve Quality of Care

Tip # 7: Root Cause Analysis (After an Error)

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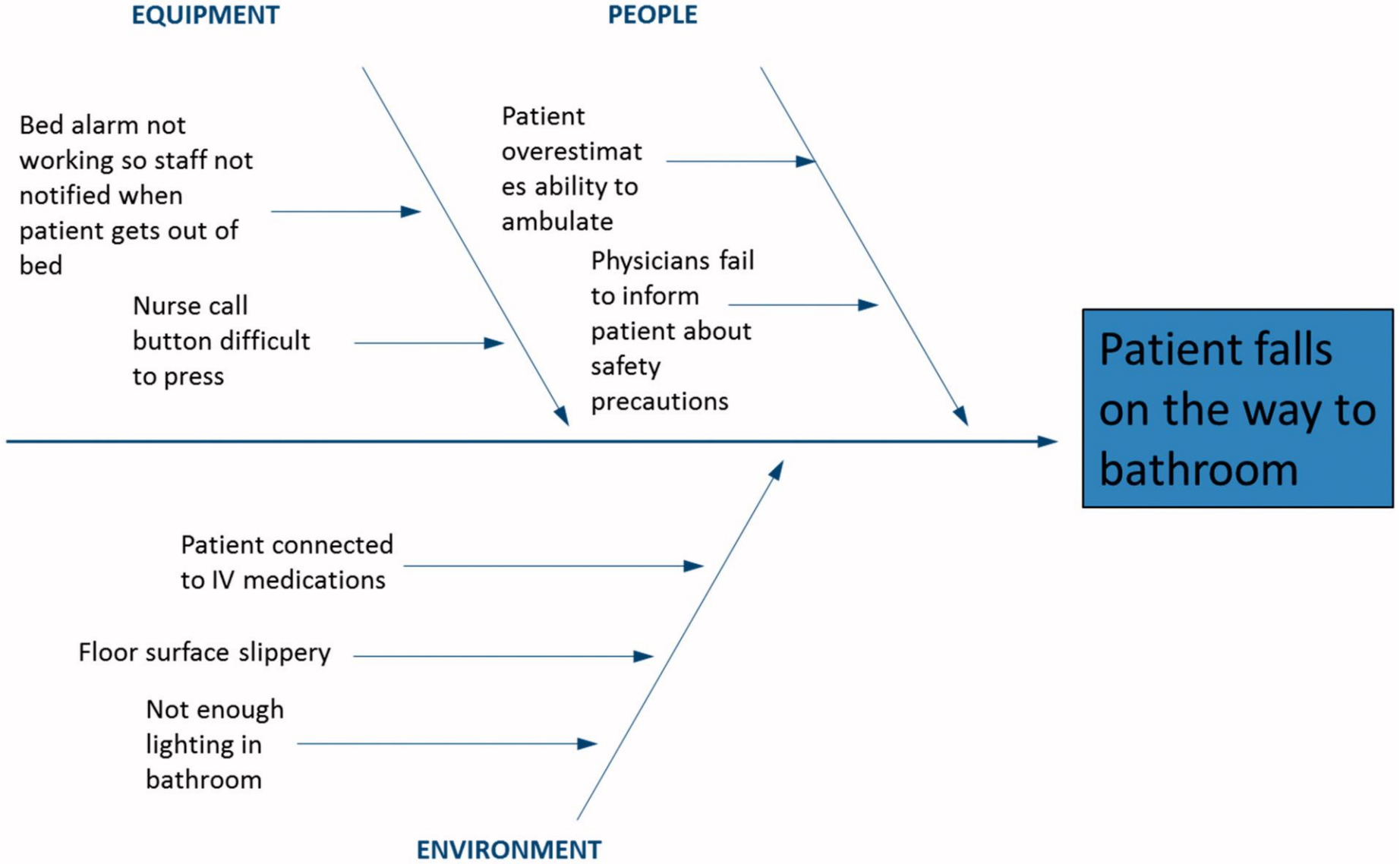
‘5 whys’: Incident: Wrong patient medication error

- Why? Patients with similar names in the same room
- Why? Not feasible to try ‘juggling beds’
- Why? Not enough nurses to deal with the influx of patients
- Why? Nurses affected by an outbreak of norovirus
- Why? Poor adherence to time-consuming infection control interventions
- Why? A culture of ‘just get the job done’

Card AJ. **The problem with ‘5 whys’**. BMJ Qual Saf 2017;26:671–677.



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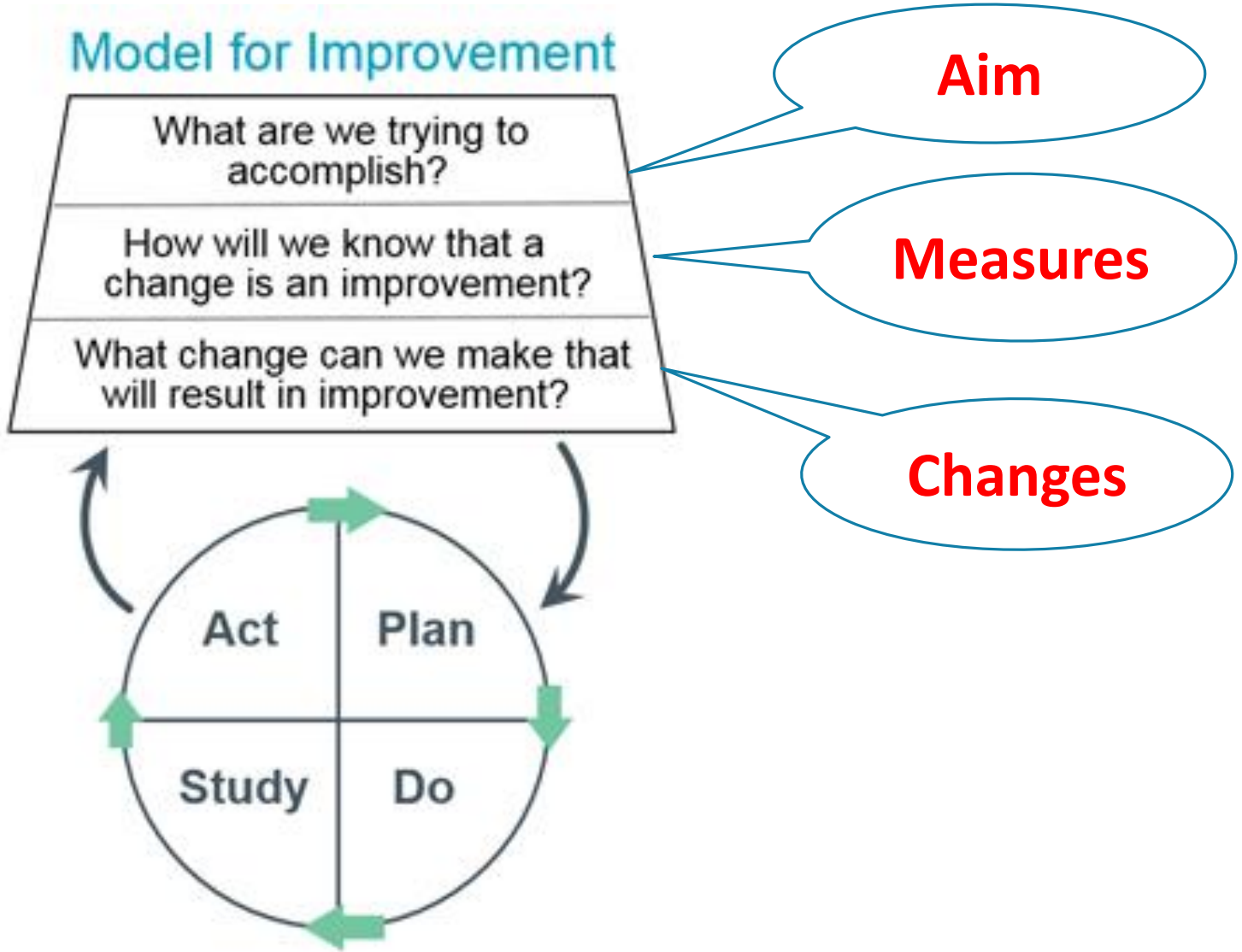
Institute *for* Healthcare Improvement



http://www.ihi.org/resources/Pages/HowtoImprove/default.aspx

Table 1. Comparison of Six Sigma, Lean, and the Model for Improvement

Six Sigma	Lean	Model for Improvement
Improvement philosophy		
Continuous improvement Reduce unwanted variability	Continuous improvement Staff respect and empowerment	Daily improvement Small–scale rapid cycle change with iterative learning
Approach		
Five-phased process (define, measure, analyze, improve, and control)	Differentiate value-from nonvalue-added activities (waste) Focus improvement efforts on eliminating waste	Set an aim Create balanced measures Identify and test changes
Common tools		
Mathematical modeling PDSA cycles Control charts	Flow diagrams Kaizen events Run charts PDSA cycles	Process mapping PDSA cycles Run charts Control charts
Training		
Experience with quantitative statistics On the job improvement experience	Lean apprenticeship On the job improvement experience	On the job improvement experience
Project length for improvement		
Months	Weeks to months	Days to weeks
Limitations		
Complex and less accessible to frontline staff Not ideal for projects focused on improving flow/speed	Japanese terms can lead to confusion Not ideal for projects focused on statistical control and reducing variation	Diagnostic tools and change ideas are adapted from other frameworks
Applications		
Cause of variation is unknown No immediate improvement solution exists	Problems that can be directly observed and managed visually Increasing process flow and speed	The main cause of the problem is already determined, and change ideas are easily identified Problems with established evidence–based solutions

PDSA, Plan-Do-Study-Act.

Silver, et al. (2016). **How to Begin a Quality Improvement Project**. CJASN, 11(5), 893–900.

Principle # 4: Designing Improvement

Tip # 8: Assessment Metrics

Narayanan, et al. (2018). **Twelve tips for teaching quality improvement in the clinical environment.** Medical Teacher, 40(10), 1060–1066.

Table 2. Measuring successful medication administration.

	Structure	Process	Outcome	Balancing
Correct medication administration	Number of pharmacists. Number of nurses.	Computer system checking for drug-drug and drug-allergy interactions. Pharmacist considering safer/ cheaper alternatives. Nurse verifies medication.	Number of correctly administered medications. Number of patients receiving correct medications. Number of adverse events as a result of receiving the wrong medication.	Delayed medication administration.

Narayanan, et al. (2018). **Twelve tips for teaching quality improvement in the clinical environment.** Medical Teacher, 40(10), 1060–1066.

Principle # 4: Designing Improvement

Tip # 9: Driver Diagrams

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Driver Diagrams

- ✓ **Process maps** identify all steps in an existing system

- ✓ **Driver diagrams** show the essential components of an intervention required to achieve improvement
  - ✓ Primary drivers: conceptual or system factors that influence the aim
  - ✓ Secondary drivers: actionable, measurable elements that affect the primary driver

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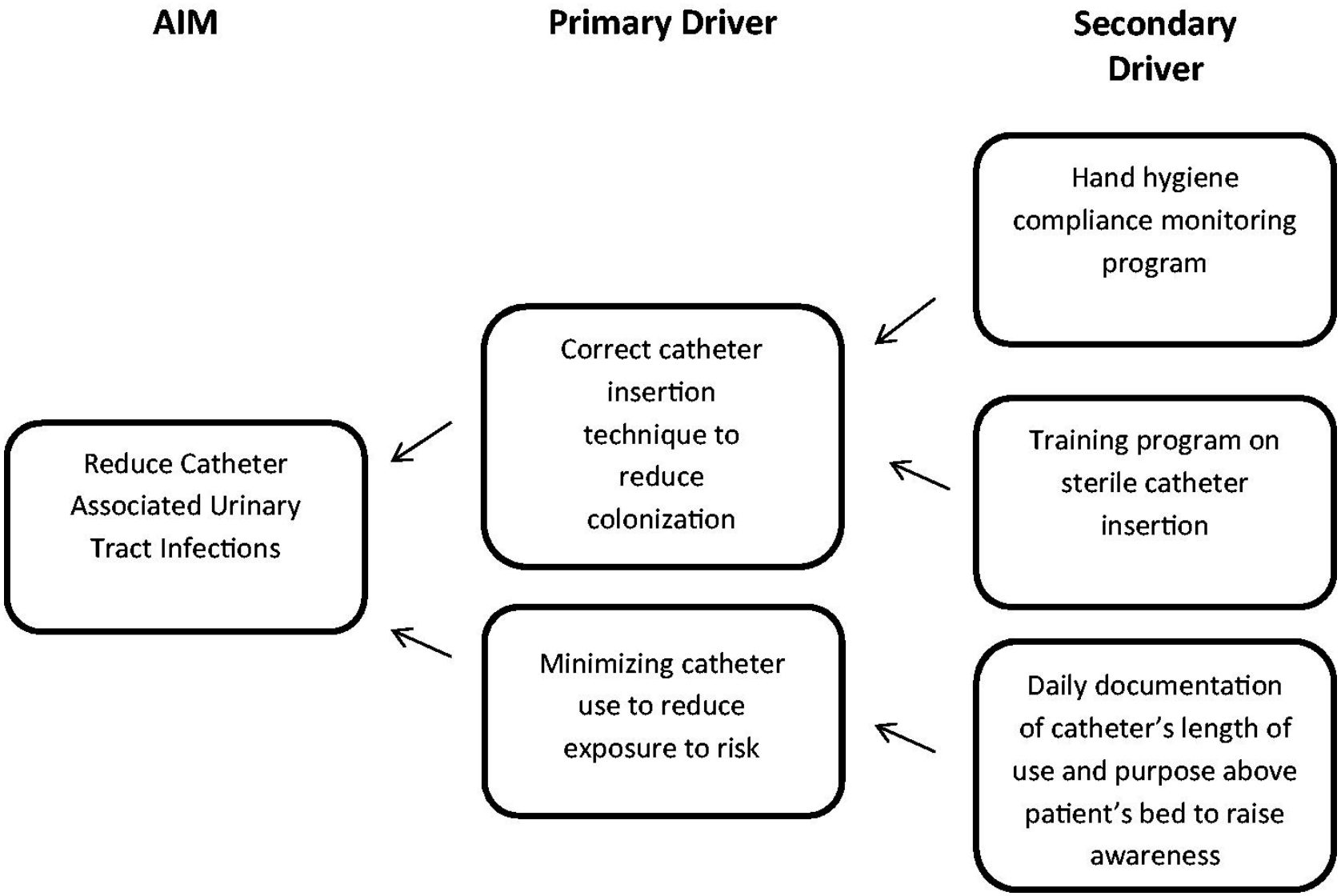

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Principle # 4: Designing Improvement

Tip # 10: SMART Aim Statement for QI Intervention

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SMART Aim Statement for QI Intervention

Specific: what/who is the target of improvement?

Measurable: How is the improvement going to be measured? (Structures, Processes and Outcomes)

Achievable: Is the goal achievable with the available resources?

Relevant: Why is the goal important?

Time-bound: How long will it take to achieve results?

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Principle # 5: Developing Interventions

Tip # 11: Bedside Checklist

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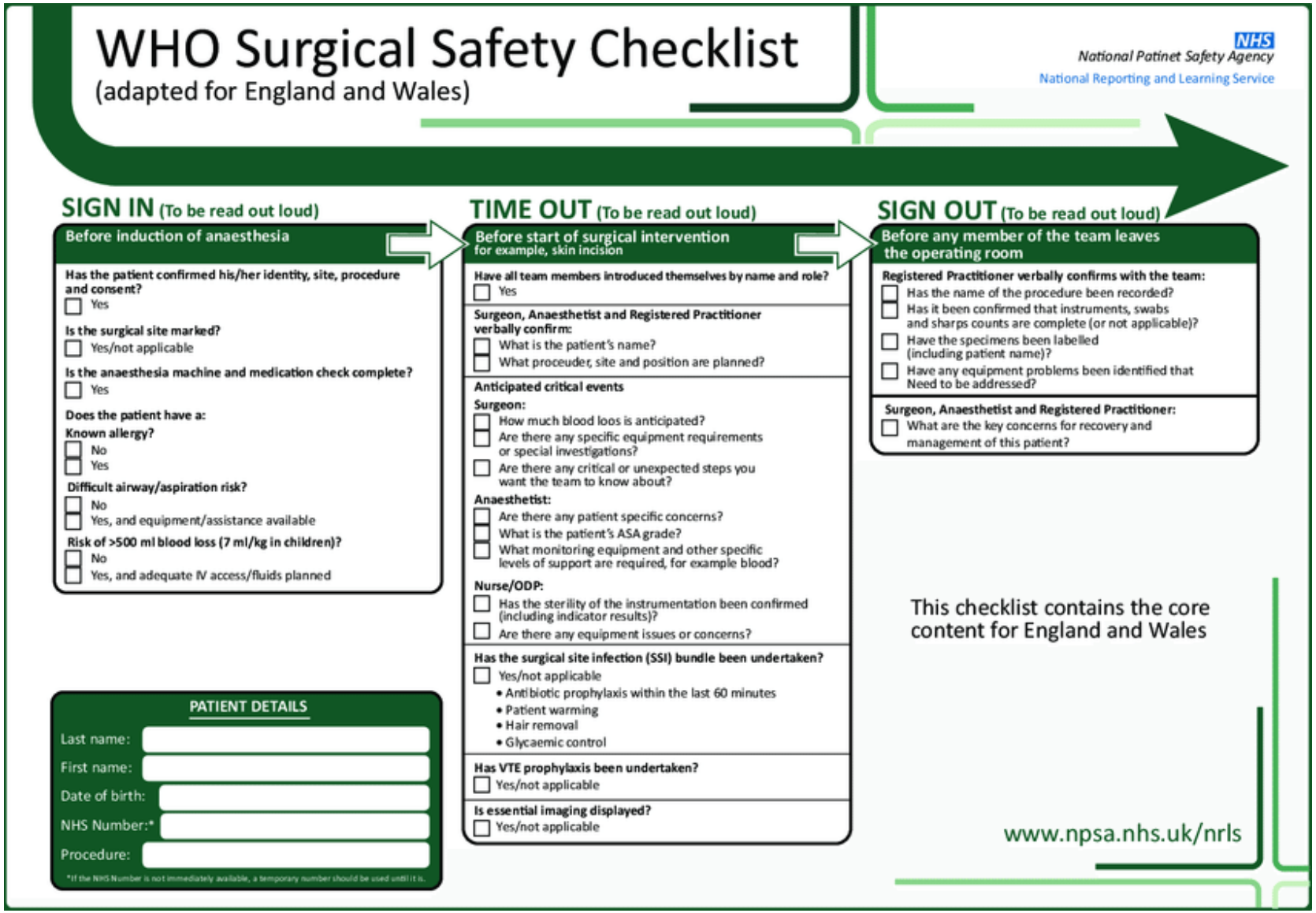
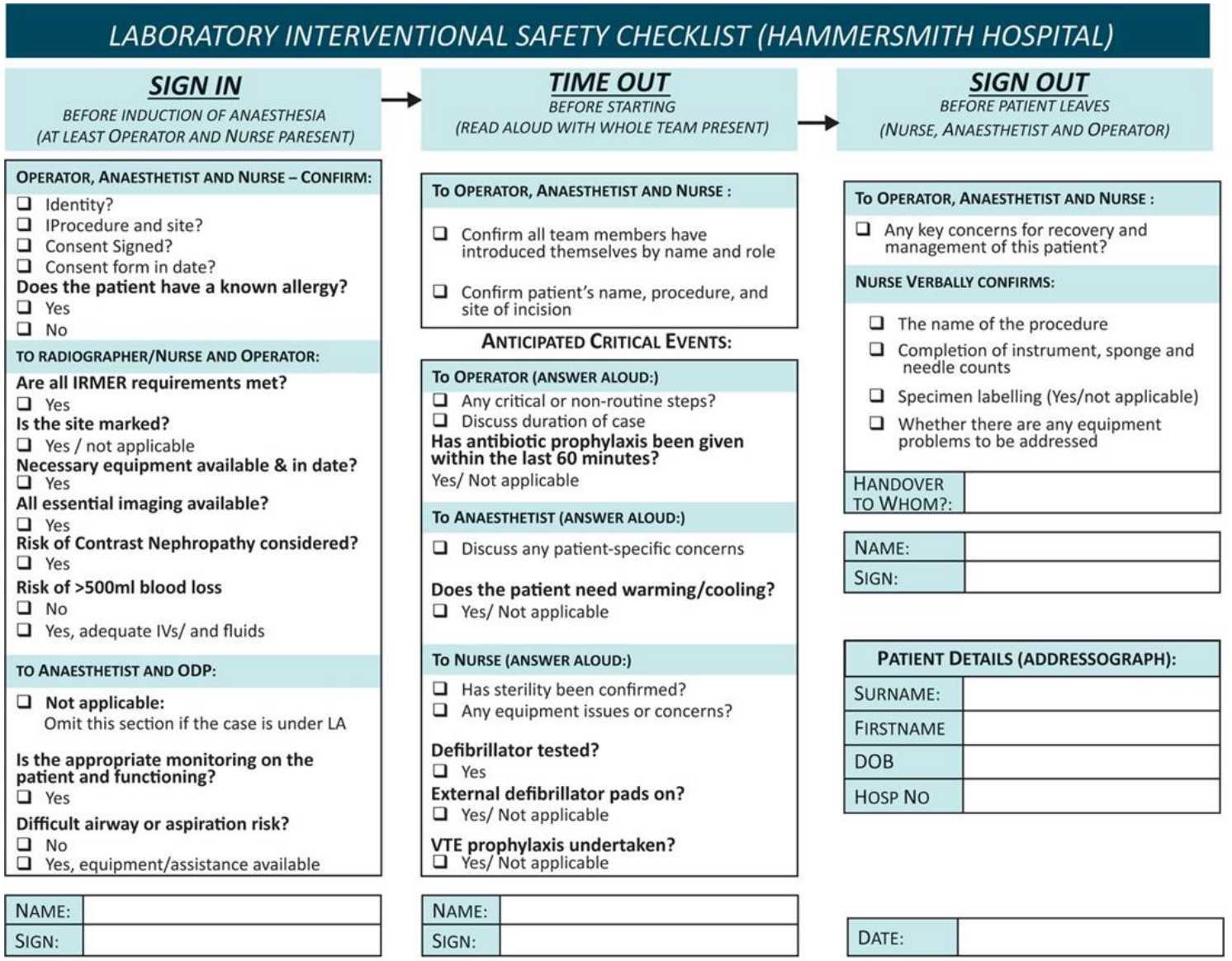


Braham et al. **Application of the WHO surgical safety checklist outside the operating theatre: medicine can learn from surgery.** Clin Med 2014;14:468-474.



LABORATORY INTERVENTIONAL SAFETY CHECKLIST (HAMMERSMITH HOSPITAL)

SIGN IN
BEFORE INDUCTION OF ANAESTHESIA
(AT LEAST OPERATOR AND NURSE PARESENT)

OPERATOR, ANAESTHETIST AND NURSE – CONFIRM:

- ❑ Identity?
- ❑ IProcedure and site?
- ❑ Consent Signed?
- ❑ Consent form in date?

Does the patient have a known allergy?

- ❑ Yes
- ❑ No

TO RADIOGRAPHER/NURSE AND OPERATOR:

Are all IRMER requirements met?

- ❑ Yes

Is the site marked?

- ❑ Yes / not applicable

Necessary equipment available & in date?

- ❑ Yes

All essential imaging available?

- ❑ Yes

Risk of Contrast Nephropathy considered?

- ❑ Yes

Risk of >500ml blood loss

- ❑ No
- ❑ Yes, adequate IVs/ and fluids

TO ANAESTHETIST AND ODP:

- ❑ **Not applicable:**
  Omit this section if the case is under LA

Is the appropriate monitoring on the patient and functioning?

- ❑ Yes

Difficult airway or aspiration risk?

- ❑ No
- ❑ Yes, equipment/assistance available

NAME:	
SIGN:	

TIME OUT
BEFORE STARTING
(READ ALOUD WITH WHOLE TEAM PRESENT)

TO OPERATOR, ANAESTHETIST AND NURSE :

- ❑ Confirm all team members have introduced themselves by name and role
- ❑ Confirm patient's name, procedure, and site of incision

ANTICIPATED CRITICAL EVENTS:

TO OPERATOR (ANSWER ALOUD:)

- ❑ Any critical or non-routine steps?
- ❑ Discuss duration of case

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

TO ANAESTHETIST (ANSWER ALOUD:)

- ❑ Discuss any patient-specific concerns

Does the patient need warming/cooling?

- ❑ Yes/ Not applicable

TO NURSE (ANSWER ALOUD:)

- ❑ Has sterility been confirmed?
- ❑ Any equipment issues or concerns?

Defibrillator tested?

- ❑ Yes

External defibrillator pads on?

- ❑ Yes/ Not applicable

VTE prophylaxis undertaken?

- ❑ Yes/ Not applicable

NAME:	
SIGN:	

SIGN OUT
BEFORE PATIENT LEAVES
(NURSE, ANAESTHETIST AND OPERATOR)

TO OPERATOR, ANAESTHETIST AND NURSE :

- ❑ Any key concerns for recovery and management of this patient?

NURSE VERBALLY CONFIRMS:

- ❑ The name of the procedure
- ❑ Completion of instrument, sponge and needle counts
- ❑ Specimen labelling (Yes/not applicable)
- ❑ Whether there are any equipment problems to be addressed

HANDOVER TO WHOM?:	

NAME:	
SIGN:	

PATIENT DETAILS (ADDRESSOGRAPH):

SURNAME:	
FIRSTNAME	
DOB	
HOSP NO	

DATE:	

'Based on the WHO Surgical Safety Checklist, URL http://www.who.int/patientsafety/safesurgery/en, © WHO 2008 All rights reserved.' Adapted by Dr D Braham, Dr I Malik. September 2013

Braham et al. **Application of the WHO surgical safety checklist outside the operating theatre: medicine can learn from surgery.** Clin Med 2014;14:468-474.

Principle # 5: Developing Interventions

Tip # 12: Plan-Do-Study-Act (PDSA) Cycles

Narayanan, et al. (2018). **Twelve tips for teaching quality improvement in the clinical environment.** Medical Teacher, 40(10), 1060–1066.

PDSA Worksheet for Testing Change

Aim: (overall goal you wish to achieve)

Plan

Every goal will require multiple smaller tests of change

Describe your first (or next) test of change:	Person responsible	When to be done	Where to be done

List the tasks needed to set up this test of change	Person responsible	When to be done	Where to be done

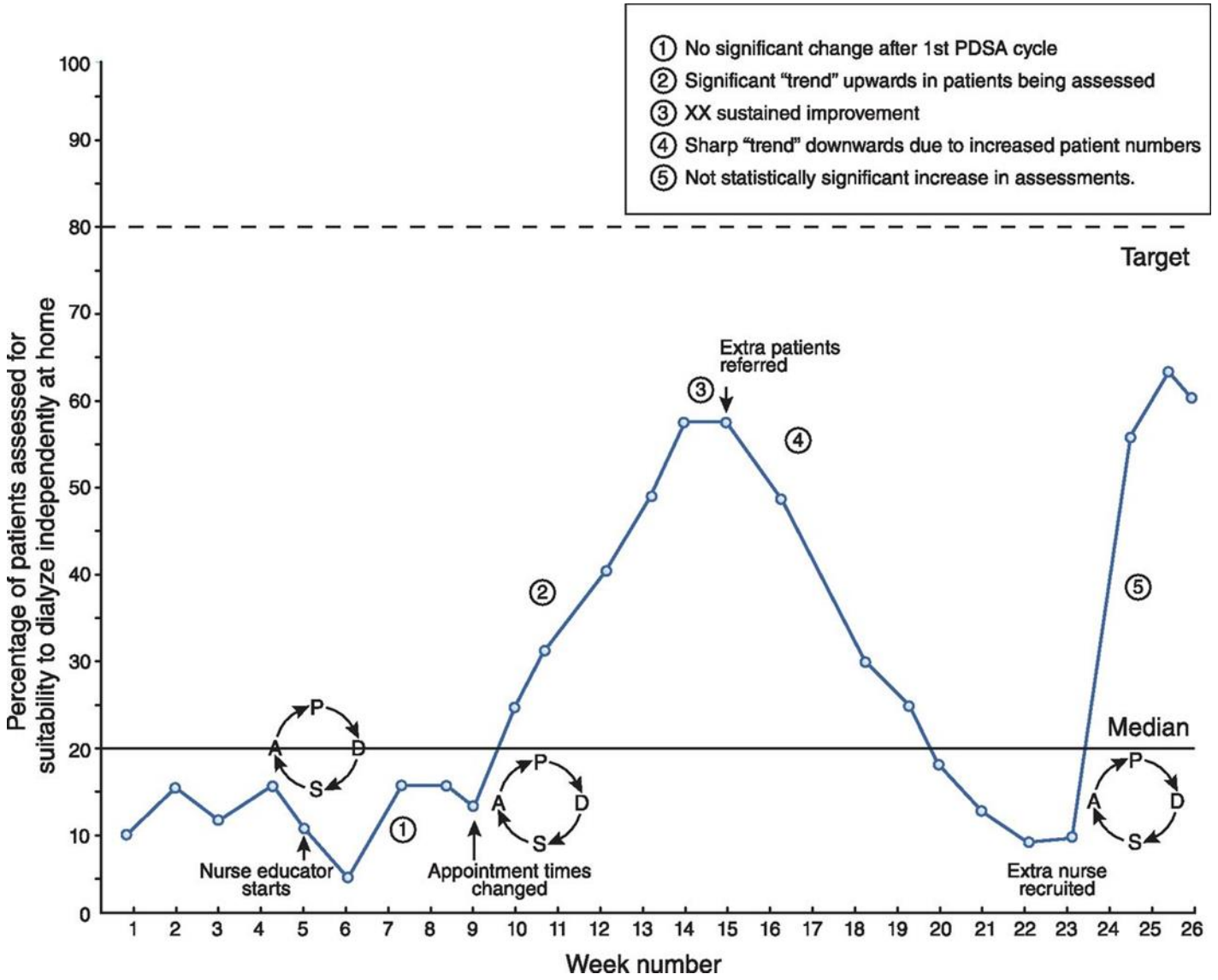
Predict what will happen when the test is carried out	Measures to determine if prediction succeeds

Do **Describe what actually happened when you ran the test**

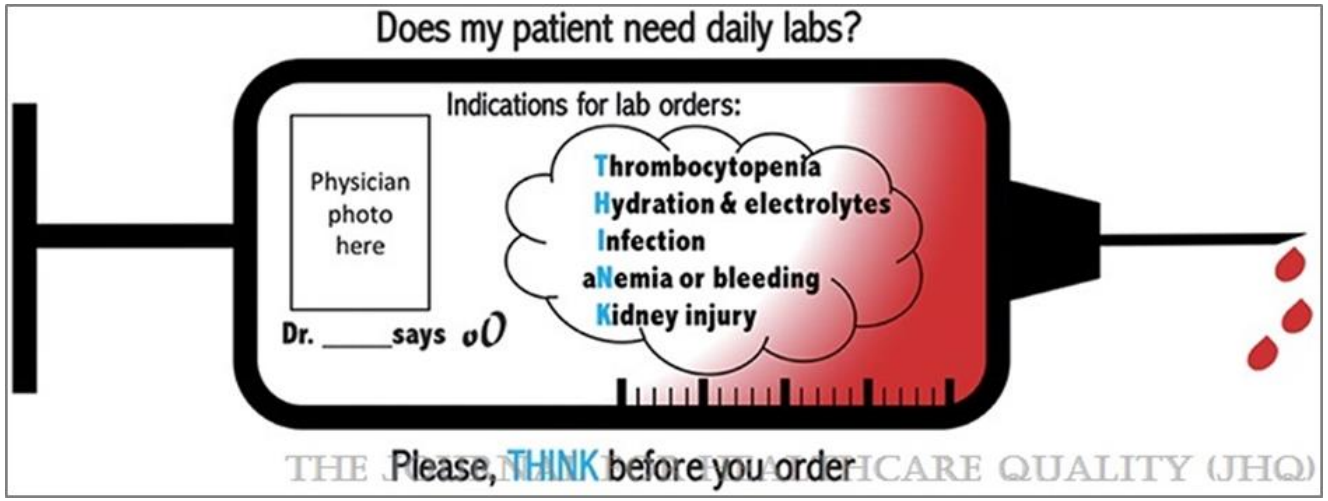
Study **Describe the measured results and how they compared to the predictions**

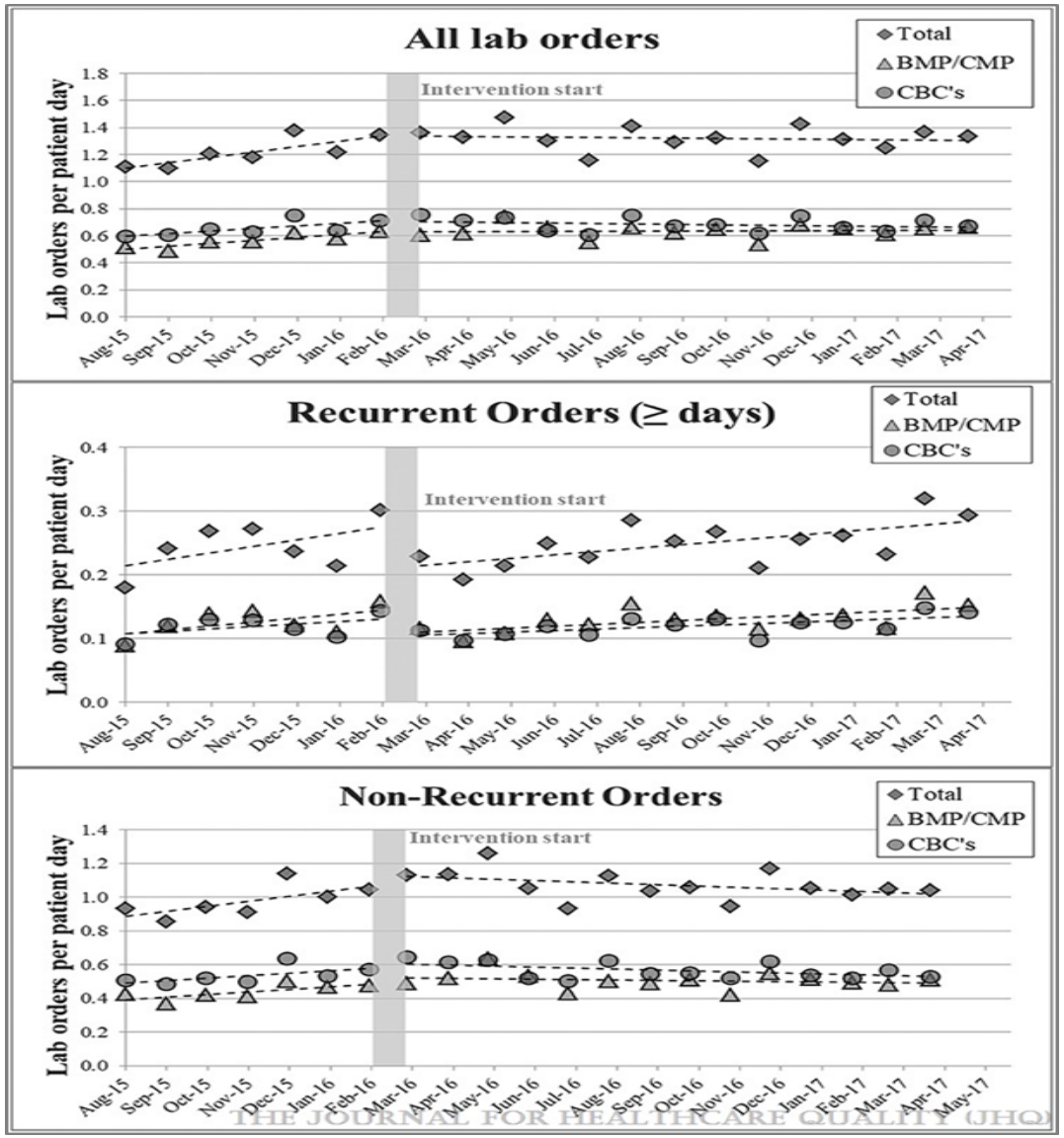
Act **Describe what modifications to the plan will be made for the next cycle from what you learned**

McQuillan et al. **How to Measure and Interpret Quality Improvement Data**. CJASN 2016;11:908-914



McQuillan et al. **How to Measure and Interpret Quality Improvement Data**. CJASN 2016;11:908-914





Shinwa, et al. **"THINK" Before You Order: Multidisciplinary Initiative to Reduce Unnecessary Lab Testing**.
The Journal for Healthcare Quality (JHQ)41(3):165-171, May/June 2019.

Annals of Internal Medicine®

On Being a Doctor | 5 August 2008

Plan-Do-Study-Act Cycle Rejuvenates a Marriage

Manoj Jain, MD, MPH

Author, Article and Disclosure Information

https://doi.org/10.7326/0003-4819-149-3-200808050-00013

The NEW ENGLAND JOURNAL of MEDICINE

SPECIAL ARTICLE

Changes in Medical Errors after Implementation of a Handoff Program

A.J. Starmer, N.D. Spector, R. Srivastava, D.C. West, G. Rosenbluth, A.D. Allen, E.L. Noble, L.L. Tse, A.K. Dalal, C.A. Keohane, S.R. Lipsitz, J.M. Rothschild, M.F. Wien, C.S. Yoon, K.R. Zigmont, K.M. Wilson, J.K. O'Toole, L.G. Solan, M. Aylor, Z. Bismilla, M. Coffey, S. Mahant, R.L. Blankenburg, L.A. Destino, J.L. Everhart, S.J. Patel, J.F. Bale, Jr., J.B. Spackman, A.T. Stevenson, S. Calaman, F.S. Cole, D.F. Balmer, J.H. Hepps, J.O. Lopreiato, C.E. Yu, T.C. Sectish, and C.P. Landrigan, for the I-PASS Study Group*

N ENGL J MED 371;19 NEJM.ORG NOVEMBER 6, 2014

Mnemonic Letter	Description	Key Points
I	Illness Severity	• Identification of patient's level of acuity to focus attention appropriately at the start of the handoff communication • Suggest classifying each patient using a standardized language such as stable, "watcher" (a patient where any clinician has a concern that a patient is at risk of deterioration), or unstable • May include code status • Classification may vary depending on unit acuity, provider type, or institutional culture
P	Patient Summary	• Describes succinctly the reason for admission, events leading up to admission, hospital course, and plan for hospitalization • Should reflect global plan for entire hospital stay and avoid "to-do" items for next shift • Should be maintained and updated regularly with modification of assessment, diagnoses, and changes in treatment plans as necessary • Events leading up to admission may be truncated with time and diagnostic certainty yet should retain key reason for admission to allow new providers to understand nuances of presentation
A	Action Items	• Includes a "to-do" list with specific elements to accomplish over next shift by team assuming care of patient • Should specify timeframe for completion, level of priority, and who is responsible • Specify "nothing to do" if no action items are anticipated

S	Situation Awareness and Contingency Plans	• Situation Awareness: knowing what is going on for members of the care team (status of patients, environmental factors, team members) and for each individual patient (status of disease process, progress towards goals for hospitalization)
		• Contingency Plans: with situation awareness in mind, provide team assuming care of the patient with specific instructions for how to handle anticipated problems.
		  ◦ Typically includes "if/then" statements
		  ◦ Specify "no contingencies anticipated" for stable patients
		• Ensures accepting team is prepared to anticipate changes in patient status and respond to potential events

S	Synthesis by Receiver	• Provides a brief re-statement of essential information in a cogent summary by receiving team • Demonstrates information is received and understood • Ensures effective transfer of information and responsibility • Opportunity for receiver to clarify elements of handoff, ensure clear understanding, and play an active role in handoff process • Will vary in length and content depending on acuity level of patient • Should prioritize re-statement of key action items and contingency plans: not a re-statement of the entire verbal handoff

Starmer, et al. **Changes in medical errors after implementation of a handoff program**. N Engl J Med 2014;371:1803-12.

Study Conclusion:

Implementation of the handoff program was associated with significant reductions in medical errors and in preventable adverse events and with improvements in communication, without a negative effect on workflow.

Starmer AJ, Spector ND, Srivastava R, et al. **Changes in medical errors after implementation of a handoff program**. N Engl J Med 2014;371:1803-12.

Clinical Documentation Improvement Project: Report of a Pilot Educational Intervention Study

Ahmad Raed Tarakji, MD, FRCPC, FISQua, CPHQ

On behalf of

Documentation Task Force: Dr. Ahmed Abdulwarith, Dr. Musa Alzahrani, & Mrs. Heba Bou Mahdi

Department of Medicine & QMD

Problem

An internal audit (QMD) in May 2017: very low compliance of medical residents (use of free text notes not e-templates)

- Patient's Chief Complaint: 23%
- Past Medical History: 23%
- Social History: 8%

Change Project (University of Dundee, Sep 2018)

Strategy: FOCUS-PDSA

F

- **Find an Opportunity to Improve:**
- *Poor documentation affecting patient care efficiency and effectiveness*

O

- **Organize a Team:**
- *Documentation Task Force*

C

- **Clarify the Current Process:**
- *Low resident compliance with documentation templates per audit by QMD*

U

- **Understand the Root Cause:**
- *Cause and Effect (Fishbone) Diagram & Empathy Map*

S

- **Select the Improvement Process:**
- *Small group interactive teaching sessions*

Strategy: FOCUS-PDSA

P

- **Plan the improvement:**
- *Checklist, 2 meetings, & Feedback survey*

D

- **Do the improvement to the process:**
- *Meetings done & Feedback collected*

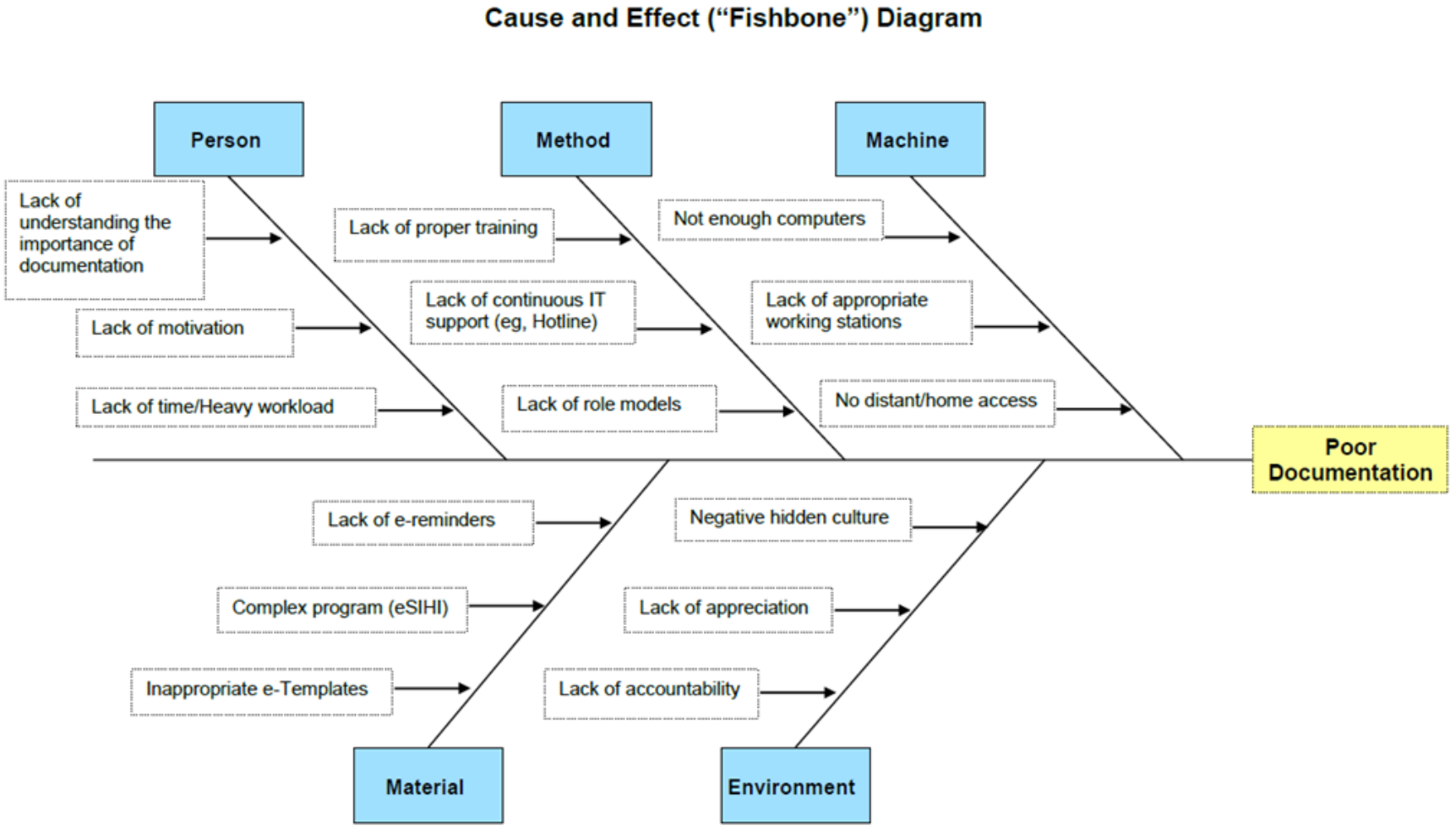
S

- **Check the results:**
- *Audit again to check improvement & Feedback was positive*

A

- **Act to hold the gain and continue to improve the process:**
- *Needs to build capacity by intensive training for resident documentation champions*

Assessment of Problem: Fishbone Diagram (Consultants)



Responding to patient safety incidents - Valerie's story (6:06)

https://www.youtube.com/watch?v=Dyw8Sf_Z9XA

International Journal for Quality in Health Care

ISQua
International Society for Quality in Health Care

Article Contents

CORRECTED PROOF

COVID-19: patient safety and quality improvement skills to deploy during the surge FREE

Anthony Staines ✉, RenÉ Amalberti, Donald M Berwick, Jeffrey Braithwaite, Peter Lachman, Charles A Vincent

International Journal for Quality in Health Care, mzaa050,
https://doi.org/10.1093/intqhc/mzaa050

Published: 27 May 2020 **Article history** ▾

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View Metrics

COVID-19: patient safety and quality improvement skills to deploy during the surge

Staines, et al., *International Journal for Quality in Health Care, mzaa050*

1) **Strengthen the system** by assessing readiness, gathering evidence, setting up training, promoting staff safety and bolstering peer support
2) **Engage** with citizens, patients and their families so that the solutions are jointly achieved and owned by both the healthcare providers and the people who receive care and in particular the citizens who are required to undertake preventive interventions
3) **Work to improve care**, through actions such as the separation of flows, flash workshops on teamwork and the development of clinical decision support
4) **Reduce harm** by proactively managing risk to both COVID-19 and non-COVID-19 patients
5) **Boost and expand the learning system**, to capture improvement opportunities, adjust very rapidly and develop resilience

Questions & Evaluation