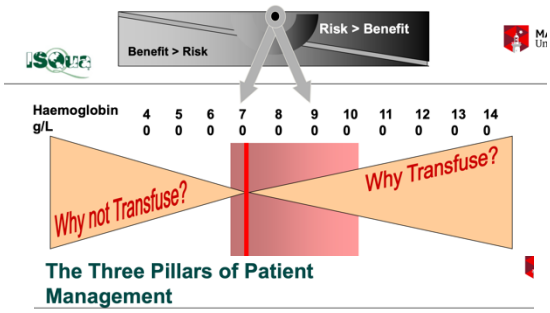
PATIENT SAFETY & QUALITY

1. Clinical Governance Standard

a. Organisational leadership
b. Safe environment for delivery of care
   i. Open disclosure, feedback and complaints management
   ii. Risk management
   iii. Evidence-based care



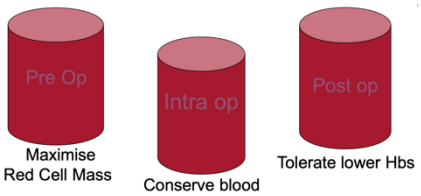
The Three Pillars of Patient Management

2. Comprehensive Care standard

a. Deliver comprehensive care at end of life
b. Minimise patient harm + continued care (e.g. falls, pressure injuries, poor nutrition, cognitive impairment)

3. Blood management standard

a. **Blood watch** – state-wide transfusion medicine improvement program
b. *Indications for transfusion* – **standard dose 2 units** to minimise complications from transfusions
c. **RBC audits** → minimise unnecessary transfusion (e.g. Hbs > 70)
d. Minimise waste, storage and distribution and tracing blood and blood products

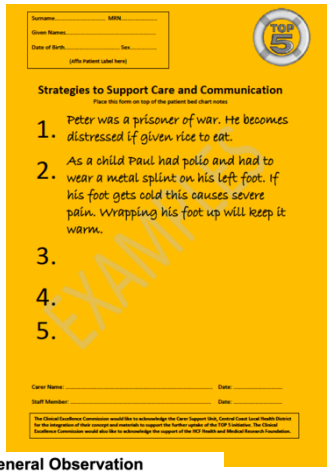


4. Prevent & Controlling Infection standards – *prevent infection + appropriate prescribing to minimise Abx resistance*

a. Antibiotic stewardship
b. Hand hygiene + aseptic technique + clean environment + workforce immunisation

5. Partnering with consumers standards

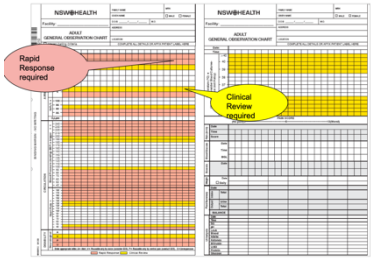
a. At level of individual, service + health service organisation
b. Partner with patients/carers for individualised + optimised care
c. *improve communication* (**TOP 5**) – **informed consent & Improve health literacy**
   i. **T**alk to the carer
   ii. **O**btain the info
   iii. **P**ersonalise the care
   iv. **5** strategies developed – falls, anti-psychotics,



6. Medication safety standard

a. Monitor drug allergies + ADRs
b. Continuity of medication management
c. Safe + secure storage + distribution of medicines

Standard Adult General Observation Chart (SAGO)



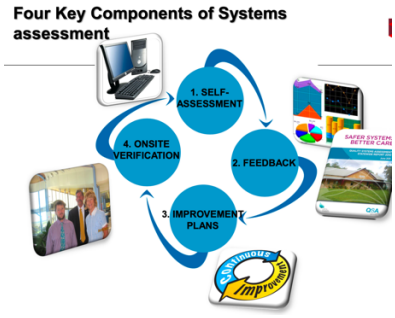
7. Communicating for safety standard

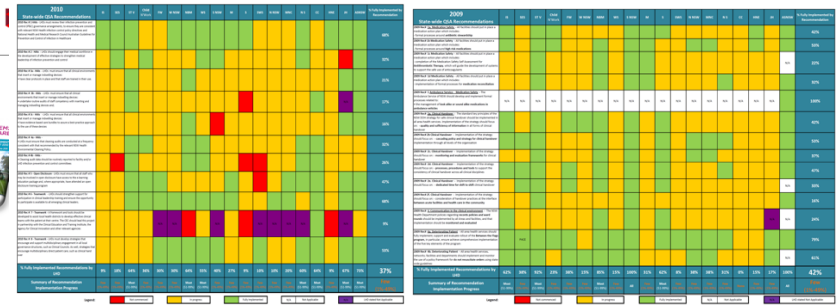
a. Safe concise Clinical handover - ISBAR
b. Timely communication of critical information

8. Recognising and responding to acute deterioration standard

a. ***Between the flags program*** (SAGO chart)– detect the deteriorating pt
   i. Call criteria (escalations of care) for rapid response rate
b. Sepsis kills programs
c. ***Guideline checklist*** for central line assoc. bacteraemia (CLAB)

HOW DO WE KNOW IF PROPOSED PSQ FRAMEWORK ACTUALLY WORK? - SIMPLE IS BEST!

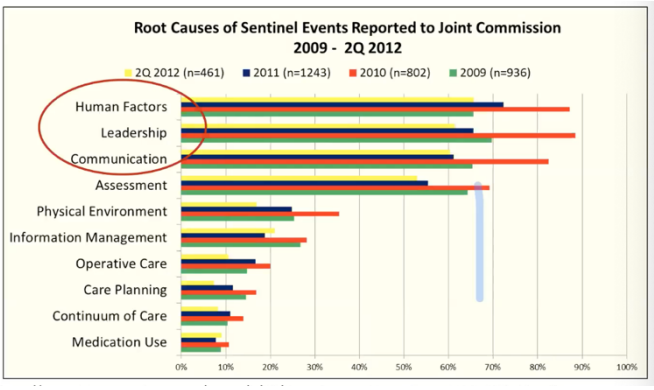




Surgical Teams: Time-out, Huddle and Handover

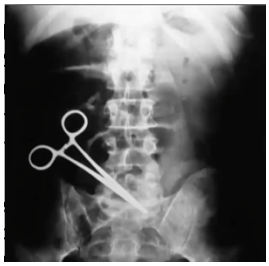
Adverse events (complication) = **any** injury caused by medical management other than underlying condition of patient

- 66% are surgical
- 50% are preventable
- Used to assess practitioner's performance



Always ask why still in hospital?

- Not safe to go home
- Issues at home
- Logistics to go home
- Nowhere to go
- Need to organise respite care
- Need to complete rehabilitation



Errors occur due to:

Human factors	5 worst medical nightmares
• Workload fluctuations • Fatigue • Not following protocol • Poor handovers (bad communication) • Complacency • Poor working hours	• Wrong site surgery • Wrong patients • Retained instruments and swabs

Need teamwork and ask for help!

Benefits to doctors	Benefit for patient
• Conflict management • Better accountability for team performance • Reduced stress on team • Improve patient safety	• Reduced length of stay • Lower staff turnover • Higher QoL • Greater ability to meet family member needs

- Any team member may be called upon to be leader in a given situation/or subpart of the effort.
- Designated team leaders are always team members at the same time.

Leaders	Members	Leaders	Members
• Organize the team • Articulate clear goals • Make decisions through collective input of members • Empower members to speak up and challenge • Actively promote and facilitate good teamwork • Assist in conflict resolution	• Understand their role • Agree on the goals • Provide input to decisions, assert their case • Speak up and challenge • Actively promote and facilitate good teamwork • Be open to conflict resolution	• Initiate planning and include team members • Delegate tasks – What, to whom – State clear expectations – Ask for feedback • Facilitate conflict resolution – Two-attempt rule – DESC script – Helping team members practice techniques – Serving as a mediator	• Contribute to planning process, initiate subparts of the plan • Accept delegation, be accountable, provide feedback • Practice and use conflict resolution techniques • Mediate among coworkers informally

Situational awareness = team members should understand:

- what is going on
- what is likely to happen next
- Be sensitive to cues
- Be aware of implications (e.g. verbal abuse, fatigue, interruptions, change in team member/nursing staff)

Briefing: discuss in a team using succinct info pertinent to an upcoming event

Team Huddle in OT (not the same as Sign-in) **[5-10mins]**

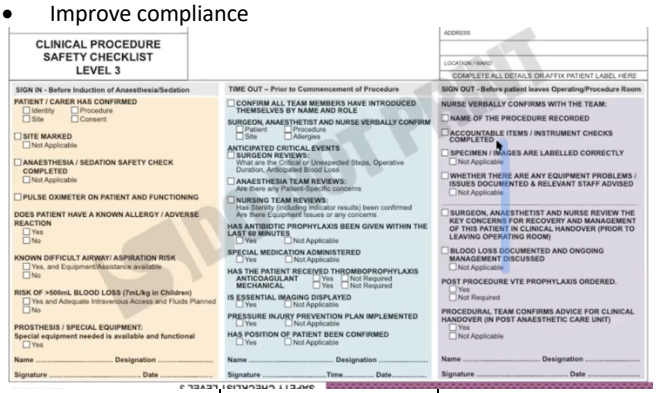
- Short, stand-up meeting once a day → Involve team members to review pt data on course of action
- Flag issue for *today*
- Review tracked issues *previously*
- Input from staff and announcements
- Anyone can ask for team huddle, anytime (DON'T CRY WOLF!)

INFORMATION EXCHANGE STRATEGIES:

- ISBAR (referral)
- **Call-Out** (communicate important or critical information)
- **Check-back (**paraphrase and verifying information)
- **Handover (**transfer information – modified ISBAR**)**

Surgical safety checklist

- Reduce errors and adverse events
- Consistent culture of safety between all surgical team members
- Improve compliance



Sign IN	Time-out	Sign-out
• Performed by nurse and circulator (NOT surgeon) • Before induction of anaesthesia • Ready to go to theatre • DVT prophylaxis assessment done • Warming prepared	• Performed by entire surgical team • Before skin incision • Detail: ○ Expected duration ○ Abx re-dosing plans ○ Acting warming ○ DVT prophylaxis	• Performed by surgeon • Before pt leaves OT • Safe to end Operation • Pt recovery + management ○ Meds (Abx, analgesia) ○ Tubes/lines ○ Post-op studies (labs, Radiology) ○ Destination (ICU, ward, home) ○ Key concern

Prevention & Health: Public Health Ethics

Key ethical values underpinning public health

Foundations of ethics: moral theories

Consequences	An action is right if it produces the best consequences and wrong if it does not • ***Utilitarianism = action that obtains*** maximum sum of happiness
Duties and obligations	nature of the act is morally important
Character and virtues	what would a good person do in this situation?

Practical clinical ethics: pluralistic values and principles

Beneficence "acting in patient's best interest"	Duty of care + Do NO harm + paternalism
Justice & Equity	Exploitation + health equity + healthcare access
Patient autonomy	Consent + confidentiality + rights+ dignity

Contrast the ethical values of public health with those of clinical ethics

	Public health • Requires organised effects of society	**Clinical practice**
Actors	Duties and obligations – medical professionals + government (ministers) + different branches of government (e.g. transport) + community	One on one interactions (simplistic)
Recipients of care	Poorly defined broader target population (e.g. adolescent group) • Typically anonymous recipients	Patient (immediate rewards)
Scope of action	Broad (non-medical based e.g. food labelling, tobacco tax, wearing seatbelts)	Medically based (e.g. dx, prescribing drugs)
Decisions made and limitations	Interventions backed by state and enforced by law (regardless of views) • Governmental agencies implementing policies	Up to patient what care they accept / decline

Nuffield Intervention Ladder and Kass's 6 step framework

Kass's 6-Step Framework

Kass's helps medical professionals to ethically evaluate public health interventions.

Key Public health values	***Key considerations for Kass***
1. Beneficial conseq. [benefits > burdens]	**1. [Goals] What are the public health goals of the proposed program?** a. To count as PH → must be health related (e.g. reduce mortality) **2. [Effectiveness] How effective is program in achieving its stated goals?** a. Any assumptions? Any previous evidence? b. *Precautionary principle* in cases of insufficient or poor evidence: "Duty to protect vulnerable pop. from foreseeable threats" (e.g. GMOs → what happen if released into wild → STOPPED) E.g. *COVID-19 → restrictions on international as well as state border movement in Australia and other island states (e.g. NZ, Taiwan) [employing precautionary principle]* **3. [Burdens] What are the known or potential burdens of the program?** a. Risks to **privacy** (*e.g. contact tracing, surveillance*) b. **justice** (*e.g. targeting specific groups for DV based on data may be perceived as stigmatising*) c. **liberty** [*e.g. everyone wearing masks*]
2. Protecting liberty	**4. Can burdens be minimized? Are there alternative approaches?** a. Any alternatives? → choose option with fewest risks to harm, liberty, well-being & justice
3. Procedural fairness / justice	**5. Is the program implemented fairly?** a. Are burdens shared equally? Benefits available to all and equally?
4. Justice and equity	**6. How can the benefits and burdens of a program be fairly balanced?** **a.** Consider minorities? Respect dissent? Open discussion **b.** Requires society approach

Nuffield Intervention Ladder

Nuffield offers an ***intervention ladder*** for assessing the **liberty consequences** of increasing levels of intervention.

1. **Do nothing**
2. **Provide info**
3. **Enable choice** (no enforcement)
4. **Guide choice** (public health nudge)
5. Guide choice **via incentives** (e.g. money for Vax)
6. Guide choice **through punishment**
7. **Restrict choice** (e.g. removing unhealthy ingredients)
8. **Eliminate choice** (e.g. wearing masks, hotel quarantine)

Ethical and legal bases for public health actions during disease outbreaks

- Public health law is **complex** in Australia, with Commonwealth and State legislation conferring **strong Ministerial powers**,
  - Law specifies obligations of medical practitioners regarding notification of a range of conditions and diseases (e.g. STDs)
    **NB: other morbidities not treated (e.g. cancers) at the time due to sole Rx of COVID (possible extra-morbidities once COVID is almost limited)*

Under *NSW Public Health Act 2010, part 2, section 8,* the Minister:
(a) may take such action, and
(b) may by order give such directions,
as the Minister considers necessary to deal with the risk and its possible consequences.

***Isolation = person known to have the disease (intervention on sicker person for benefit of healthy population) → infringes person's liberty*
****Quarantine = restrict person currently healthy but potentially infective (prevent transmission) → location can vary → equity issues for people living in small flats compared to those in large mansions (depends on people's circumstances)*

Patient safety and Quality in Health Care

	Domain #1: Clinical Knowledge	Domain #2: Patient Experience
Clinical knowledge	• Know how to treat patients & their disease	**Quality improvement projects** should seek to improve the patient experience in at ***least one*** of these **domains:** • **Safety** • **Timeliness** • **Effectiveness** (*meaningful effect on patients)* • **Efficiency** (*most economical use of resources)* • **Equitability** (*healthcare barriers)* • **Patient-centredness**
Error science & human factors *"To Err is Human"*	• ***Financial/psych impact of A/E*** on patients/family/attending doctor • Blaming & punishing individual clinicians for error rarely improves patient safety → Root cause Analysis • Human factors affecting clinician performance	
System Science & technology	• ***Generate complex systems*** ➔ Incorporate knowledge of human factors when designing safe and effective protocols → use of new technology (*e.g. life support systems, medications etc.*) • *"between the flags", blood watch – indicators for transfusion, WHO safe surgery checklist* • **Expanding role of technology** in healthcare delivery & impact on patient safety	
Teamwork/ Communication	• Functional MDT emphasizing mutual respect, shared values and psychological safety. ○ ***ISBAR,* Communication and Optimal Resolution Process (CANDOR)** • Strategies to listen to, and respond to, patients (*esp. the vulnerable and aggressive)*	
Leadership and leading change	• **Minimise bullying and disruptive behaviours** → threat to patient safety • ALL clinicians responsible to influence change and reduce medical error	
Culture of Safety	• need to give "care for the caregiver" • Aware of clinician limitations & recognise situations where escalation/help is needed	

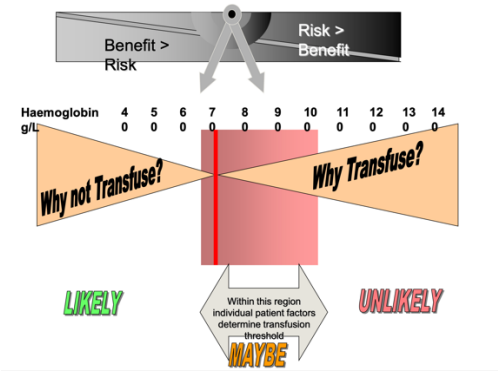
List some of the programs of the Clinical Excellence Commission (CEC) and the Agency of Clinical Innovation (ACI) and their application to patients in the acute care setting (e.g. ISBAR, Between the Flags, BloodWatch).

Blood watch: A system wide attempt to improve surgeons' prescribing behaviour of blood transfusions

- Significant inappropriate red cell transfusion in haemodynamically stable surgical patients
- Risks of transfusion in surgical patients
  - Immunomodulation
  - Increased infection rates
  - Increase length of stay

Our Approach: "Achievement through Collaboration"

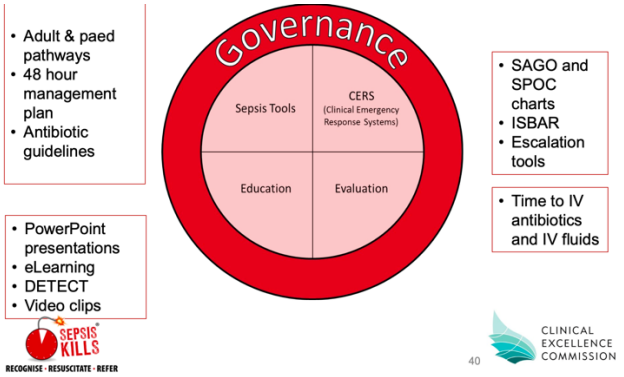
- Established effective Area Transfusion Committees (from data collection & feedback)
- Hb levels = key indicator used when prescribing
- All doctors stated they prescribe a minimum of 2 units (due to habit), felt one unit makes little difference to patients (*despite NO evidence-based support for this)
- ***Progress to date =*** Debunking Myths by presenting emerging evidence → Intended for clinicians ➔ had reduce blood/plt transfusion and increased supply



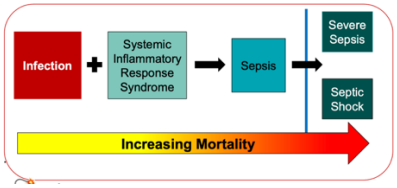
Give an example of a PSQ initiative in NSW (e.g. sepsis kills program)

Sepsis: growing worldwide problem due to:

- Increasing chronic disease
- Some groups at special risk eg. >65 yrs
- Difficult diagnosis
- **Signs not specific** – may not be febrile
- In NSW: Septic pts not receiving timely & appropriate care ➔ DELAYED **escalation of sepsis to AMO & ID physician**
- Under appreciation of sig. of (**BP <90, serum lactate >4mM**)

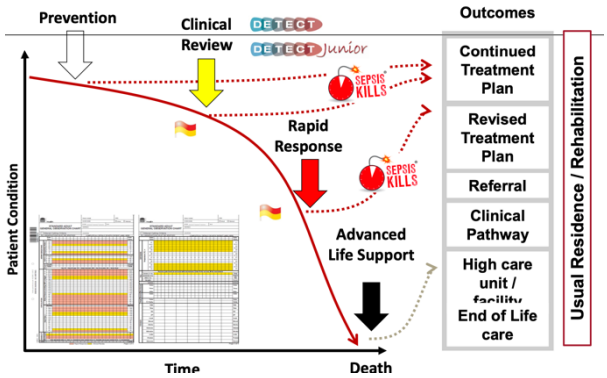


Systemic response to an ***infection/endotoxin*** leading to shock, organ failure and death ➔ DIC, end-organ failure



SEPSIS KILLS PROGRAM:

- **RECOGNISE:** Risk factors, S+S of sepsis → inform senior clinician
- **RESUSCITATE:** W/ **rapid Abx** and **IV fluids** within **one hour**
- **REFER:** To specialist care and initiate retrieval (if needed)



Early Recognition of Deteriorating Patient & Diagnostic Error

Describe the characteristics of a culture of safety

The issue in ICU:

- **Unrecognised deterioration** is **sig. problem** for patients in all health systems *despite 'hallmark' clinical signs of deterioration. Driven by:*
  - **Poor communication**
  - **Poor documentation**
- **Missed opportunities** to:
  - Prevent ➔ Recognise ➔ Escalate care
  - Respond Medical error?

Early Recognition of the Deteriorating Patient
Describe how diagnostic errors contribute to patient harm.
Define "premature closure" and appreciate its impact on diagnostic errors.
Appreciate why "calling for help" when uncertain is an important characteristic of safety cultures.
Define what "transparency" means to caregivers, patients and families.
Appreciate how learning how to ask for help can reduce patient harm.
Describe the value of an adverse event rapid response system that aims to maintain patient and family trust in the caregivers and institution.

Define "premature Closure" and appreciate its impact on diagnostic errors

Clinical error	• **Errors** during the planning stage or their execution of plans.
Premature closure (mindset issue)	• **type of cognitive error in which the physician fails** to consider **reasonable alternatives** after **initial diagnosis is made** ○ Common cause of *delayed Dx* and *misdiagnosis* borne out of a faulty clinical decision-making process. • ***New paradigm***: careful doctor → considered diagnosis → What else could it be? [tears → transparency]

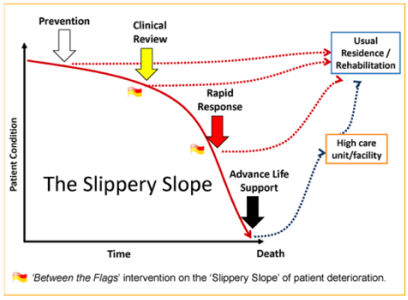
List other types of diagnostic error and how they contribute to patient harm.

Active failures	Examples based on driving to the airport for an early flight and missing the plane	Examples based on dispensing medicine
Slip	*Started driving to the airport, but fell into mental 'autopilot' and took the route to work instead*	Intended to dispense flucloxacillin but selected and dispensed amoxicillin instead
Lapse	*Intended to set an alarm, but forgot to do so and overslept*	Intended to dispense 2nd item on prescription but forgot about it and failed to give it to the patient
Violation	*Drove at 80mph and stopped by the police, resulting in a delay*	Dispensed a controlled drug from a prescription that did not meet handwriting requirements before it had been corrected to avoid inconveniencing the patient
Mistake	*Interpreted the flight time of 8am as the check-in time and arrived at the airport two hours late*	A lack of knowledge about the differences between sodium valproate 'chrono' and 'enteric-coated', leading to the dispensing of the wrong preparation

Understand why "calling for help" when uncertain is an important characteristic of safety cultures.

Between the flags **Aim:**	***Between the flags*** **Benefits**	**YELLOW ZONE** **Clinical Review within 30 mins**	**Red Zone** **Rapid response 15 mins**
• Early recognition and response to clinical deterioration • Reduce preventable deaths • Reduce serious A/E	• Simple & clear to use + '**Photocopiable'** (inc. patient details) • ***Most sensitive*** indicator of deterioration • Clinically useful - Graphed vs. written obs • Ordered A-G to support patient assessment • National standards	• Vitals outside the normal range • Aims to avoid the "Slippery Slope" • Refer to home team & Consult w/ Nurse in Charge *(discretion to call)* • Monitoring req. **BUT** no urgent response • Any new red zone reading ➔ an immediate referral made to the RRS team	• Rapid Response immediately • Based on pre-existing systems (eg MET criteria) • **MUST** Refer to Individual or team with ALS skills • No discretion about calling

The BtF system is designed to intervene in the process of patient deterioration with two key interventions: **clinical review and rapid response.**



Nursing

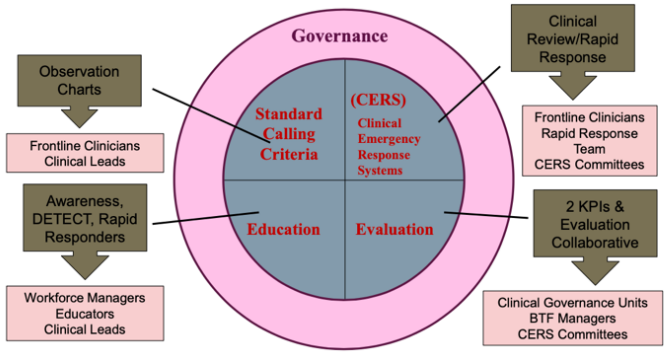
- Need for more direct patient care time
- Lack of reliable (working and available) equipment
- Need for *'a place for everything, and everything in it's place'*
- Lack of adequate staff for patient load and acuity
- Time consuming patient movements - 'churn'
- Lack of clear calling criteria
- Constant interruptions (telephone calls, on medication rounds)
- Strong reliance on automated observation equipment

EDUCATION

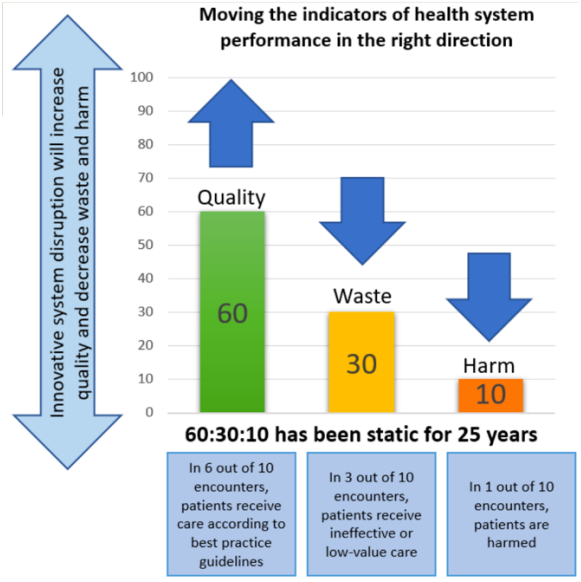
- **Tier One** – Awareness Training- intern e-orientation
- **Tier Two** – DETECT Training (improve clinician ability to recognise and respond at ward level)
  - ***D*etecting**: Deterioration, Evaluation, Treatment, Escalation, and Communication in Teams
  - MDT + E-learning modules

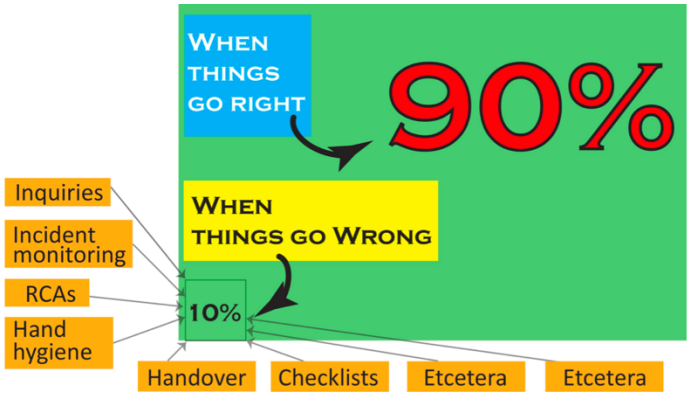
DETECT

- **Tier Three** – Responder Training

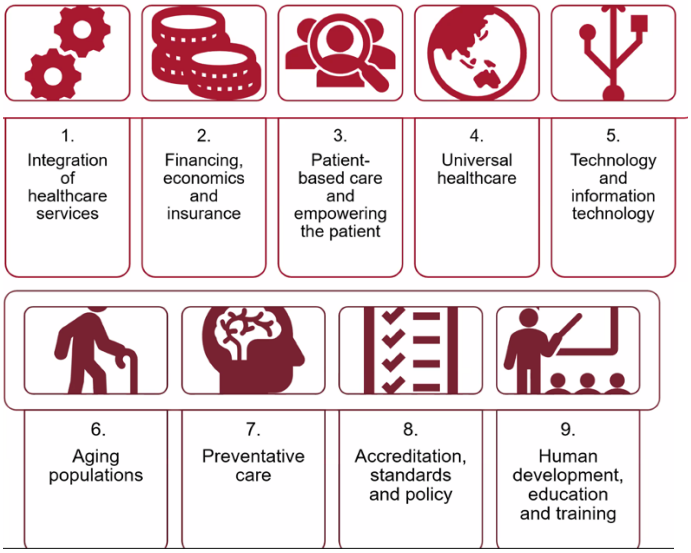


Safety-I and Safety-II: turning patient safety





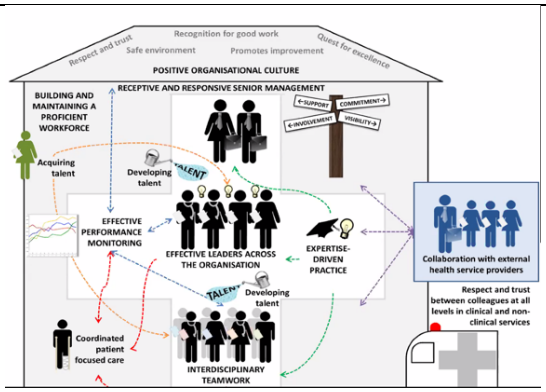
	Definition	Purpose
Safety-I	**Making # of adverse outcomes is as low as possible**	***Making sure things don't go wrong***
Safety-II	**Making # of acceptable outcomes is as high as possible**	***Making sure things go right***

9 themes of success	Key messages to project	5 main trends
	• **Positive deviance approach**: emphasise what goes right • **All health systems should provide a success story**, regardless of low SES, political structure, and available resources *Main Aim:* • ***Learning across geographical borders***: Close neighbours and other countries • ***Learning across professional roles***: Many stakeholders • ***Learning across disciplines***: Aged, acute, community care	*What trends shape health systems for the future?* • Improve Sustainability • Drive genomics revolution • Emerging technologies • Global demographic dynamics • New models of care (e.g. teleHealth)

Hx of healthcare in Australia and India in one graph: selected Apollo and AIHI studies

High performing hospitals

- **Positive organization culture**
- **Receptive and responsive senior management**
- **Performance monitoring**
- **Building workforce**
- **Expertise driven practice**
- **Inter-disciplinary teamwork**
- **Effective distributed leadership**



Global goals

- redesigning health systems, developing the workforce and with dedicated attention to quality by healthcare leaders
- Engage public = great asset
- Updated measurements and transparency are key