Ethics Principles

Jason Ryan, MD, MPH
Ethics

• Moral principles
• Govern individual or group behavior
Principlism

- Practice of using principles to guide medical ethics
- Most common US framework for ethical reasoning
- **Four core principles**
  - Autonomy
  - Beneficence
  - Non-maleficence
  - Justice
Autonomy

• **Most important US ethical principle**
• Absolute right of all competent adult patients
• To make decisions about their own healthcare
• Patient has “autonomy” over their own body
Autonomy

• Includes right to accept/not accept medical care
• Providers must respect patient decisions
• Providers must honor their preferences
Autonomy

• When patients decline medical care:
  • Okay to ask why they are declining
  • Avoid judging, threatening, or scolding
  • “You may die if you make this choice…”
  • “This choice is a mistake…”
  • “You should not do this…”
Pregnancy

• Pregnant women have autonomy
• **May decline treatment**
• Even if baby’s health is impacted
Beneficence

- Providers must act in **best interests of patients**
- Usually superseded by autonomy
  - Patients may choose to act against their interests
  - Example: Patient may decline life-saving medical care
Non-maleficence

- **Do no harm**
- Always balanced against beneficence
  - Risk versus benefits
  - Some harmful actions (surgery) are beneficial
Justice

- Treat patients fairly and equally
- Also use health resources equitably
- Triage:
  - Form of “distributive justice”
  - Care delivered fairly to all
Gifts from Companies

• Often drug or device companies/manufacturers
• Can influence physician behavior
• Generally acceptable if **educational and low value**
  • Educational dinner or textbook
  • Value usually should be <$100
• Cash, tickets, vacations, other gifts NOT acceptable
Honoraria

- **Fees** to physicians paid by industry
  - Goal usually to promote research about a new product
  - Example: Drug company pays physician to speak
- Acceptable but must be disclosed to audience
- Fee must be fair and reasonable
- Fee cannot be in exchange for physician using product
Gifts from Patients

- No definite rules
- In general, small gifts are usually okay
- Large, excessive gifts usually not okay
  - May be viewed as given in exchange for special treatment
- Decline any gift with **questionable motive**
  - Patient wanting special treatment
  - Patient having a manic episode
Romantic Relationships

- Relationships with current patients **never okay**
- Per AMA: Sexual contact within patient-physician relationship is misconduct
Patient-Physician Relationship

- Physicians may decline to care for a patient
  - Do not have to accept all patients that request care
- Once relationship starts, cannot refuse treatment
  - Example: physician does not want to perform abortion
  - Still must assist the patient
  - **Refer to another provider**
Medical Errors

• Mistakes/errors should be disclosed to patients
Family and Friends

- Most medical societies recommend against giving non-emergent medical care
  - Many ethical conflicts
- Emergencies are an exception
Family of Patients

• May be present during patient encounters
• May answer for patients, disrupt interview
• Don’t ask patient if they want family present
  • Patient may be afraid to say no
• Politely ask family for time alone with patient
Patient Refusal of Care

- Always try to understand **WHY**
  - Why doesn’t patient want to take medications?
  - Why doesn’t patient want to go for tests?
- Try to help
  - Provide more information
- **Avoid scolding or threats**
  - “You will get sick if you don’t...”
Emotional Patients

- Acknowledge the patient’s feelings
  - “I understand you are upset because...”
- Always try to understand **WHY**
  - Why is the patient upset?
  - Check for understanding of issues
- **Avoid telling patients to calm down**
- Don’t ignore emotions
Informed Consent

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Informed Consent

• All medical interventions require informed consent
• Patient must agree and consent to treatment
• Must inform patient about **benefits, risks, alternatives**
Informed Consent

- **Benefits**
- **Risks**
  - Must describe all major adverse effects
  - Commonly known risks do not need to be described
  - Example: choking on pill
- **Alternative treatments**
  - Other therapies
  - What could happen with no treatment
Informed Consent

- Must be in language the patient can understand
- Must use trained language interpreters
- Must be voluntary (not coerced)
- Patient must have decision-making capacity
Informed Consent

• Patients may withdraw consent at any time
Informed Consent

• **Every procedure** requires consent
  • Consent for one procedure does not imply consent for another
• Classic example:
  • *Mohr vs. Williams*
  • Non-life-threatening diagnosis detected in OR
  • Operation for right ear uncovered disease on left
  • Cannot operate left ear without consent
• Emergencies are an exception
Informed Consent

Exceptions

- Lack of decision-making capacity
- Emergencies
- Therapeutic privilege
- Waiver
- Minors
Emergencies

• **Consent is implied** in an emergency
• Classic example: unconscious trauma patient
Therapeutic Privilege

- May withhold info if disclosing would cause dangerous psychological threat
- Often invoked for psychiatric patients at risk of harm
- Information often temporarily withheld
- Disclosure plan put in place with family and other providers
Therapeutic Privilege

- Does not apply to distressing test results
  - Cancer diagnosis would upset patient
  - Family cannot request information be withheld
- Cannot trick patient into treatment
  - Cannot lie to patient to get them to agree to therapy
  - Patient autonomy most important guiding principle
Waiver

- Patient may ask provider not to disclose risks
- Waives the right to informed consent
- Provider not required to state risks over objection
- Try to understand why patient requests waiver
Minors

• Usually defined as person under 18 years of age
• Only parent or legal guardian may give consent
• Exceptions
  • Emergency
  • Emancipated minors
  • Special situations
Minors
Emergency Care

- Consent not required (implied)
- Care administered even if parent not present
- Care can be administered against parents’ wishes
  - Classic example: Parents are Jehovah’s Witnesses
  - Physician may administer blood products to child
  - Do not need court order
Emancipated Minor

• Minors can attain “legal adulthood” before 18
• Common criteria:
  • Marriage
  • Military service
  • Living separately from parents, managing own affairs
• Emancipated minors may give consent
Minors

Special Situations

• Most U.S. states allow minors to consent for certain interventions
• May be done without parental consent
• Contraceptives
• Prenatal Care
• Treatment for STDs
• Treatment for substance abuse
Abortion

- Rules on parental notification vary by state
Organ Donation

- Brain dead patients are possible organ donors
- Organ donation must be discussed only by individuals with specialized training
  - Conflict of interest for caregiver to request organ donation
  - Family may believe physician giving up to obtain organs
- “Organ procurement organizations”
- Often donation coordinator and attending physician
Organ Donation

- In U.S., individuals assumed NOT to be donors
- Family consent generally required
- Organ donation cards
  - Indicate a preference not final choice
  - Usually not a reason to override family refusal to donate

DNR
Do Not Resuscitate

- Patient request to avoid resuscitative measures
- Meant to decline care in case of cardiac arrest
- No CPR
- No electrical shocks
- **Other therapies may still be given**
  - Includes ICU care, surgery etc.
DNI
Do Not Intubate

- Patient request to avoid mechanical ventilation
- Often given with DNR: “DNR/DNI”
- Other therapies may still be given
Advance Care Planning

• Deciding about care **prior to incapacitation**
• Ideally done as outpatient with primary care physician
• Often done at admission to hospital
Advance Care Planning

• Goal is to identify and document patient wishes
  • DNR/DNI status (“code status”)
  • Living will
  • Health Care Proxy
• Very important in patients with **chronic illness**
  • Cancer
  • Heart Failure
  • COPD
Research

- **Research requires consent**
- All clinical research studies require informed consent
- Even if drug or therapy is FDA approved
- Even if drug or therapy has no known risks
Research

• **Institutional Review Board (IRB)**
  • Hospital and institutional committee
  • Reviews and approves all research studies
  • Ensures protection of human subjects
  • Balances risks and benefits
  • Ensures adequate informed consent
Research

• **Prisoners**
  • Informed consent required as for non-prisoners

• **Financial disclosures**
  • Many companies sponsor research
  • Must inform patients of industry sponsorship
Pregnancy

- Pregnant women may **decline treatment**
- Even if baby’s health is impacted
Documentation

- **Person performing procedure** should obtain and document patient’s consent
  - Alternative: someone VERY familiar with procedure
- Often patient asked to sign form
- Act of signing not sufficient for informed consent
  - Patient must be fully informed by provider
  - Patient must have understanding
  - Legal cases have been won despite signed form
Documentation

- **Telephone consent is valid**
  - Usually requires a “witness”
  - Provider and witness document phone consent
Confidentiality

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Confidentiality

• Healthcare information is “privileged and private”
• Providers have duty to respect patient privacy
• Disclosure of patient information should be limited
HIPAA
Health Insurance Portability and Accountability Act of 1996

• Sets national standards for protecting confidentiality
• Identifies protected health information
Confidentiality

- Information disclosed **only with patient permission**
- Includes patient’s spouse and children
  - Need patient’s permission
- Includes other physicians
  - Must obtain release of information first
- Includes government authorities
  - Unless a court order is issued
- Limited exceptions
Confidentiality

Limited Exceptions

• May tell family a patient’s location in ER/hospital
  • “Directory information”
  • Patient location in the facility, general health condition
  • No specific medical information
  • Disclosed if provider deems in patient’s best interest
Confidentiality
Limited Exceptions

• May break confidentiality when potential for harm
  • Think: If 3rd party not warned, what will happen?
  • If definite harm → answer is usually to inform
Tarasoff Case

- *Tarasoff v. Regents of the University of California* (1976)
- Tatiana Tarasoff killed by ex-boyfriend
- Ex-boyfriend treated by psychiatrist at university
- Boyfriend stated intent to kill to psychiatrist
- Authorities notified but not Tarasoff
Duty to Warn and Protect

• Psychiatric patient intending harm to self/others
  • Suicidal patients
  • Homicidal patients
• Partners of patients with STIs
STIs
Sexually Transmitted Infections

- Duty to protect/warn **partners** of patients
  - **Partners of HIV+ patients**
  - Partners of patients with other STIs
- Only applies to sexual partners
- Does not apply to other individuals
  - Co-workers
  - Students of a teacher
  - Patients of a physician
STIs
Sexually Transmitted Diseases

• Physician **may disclose STI status to partners**
• May do so without consent in special cases:
  • Reasonable effort to encourage patient to voluntarily disclose
  • Reasonable belief patient will not disclose information
  • Disclosure is necessary to protect health of partner
• **Always encourage patient to disclose first**
• Some states have partner referral services
Reportable Illnesses

• U.S. states mandate certain “reportable diseases”
  • Prevent infectious disease outbreaks
  • Most micro labs have protocols to automatically report
• Tuberculosis
• Syphilis
• Gonorrhea
• Childhood diseases (measles, mumps)
• Many other diseases that vary by state

https://wwwn.cdc.gov/nndss/conditions/notifiable/2017/
Abuse

- **Child and elder abuse** must be reported
  - Child abuse: Reporting mandatory in all U.S. states
  - Elder abuse: Reporting mandatory in most U.S. states
- Child protective services
- Adult protective services
- Usually history of repeated/suspicious injuries
- First step: child/adult **interviewed alone**
- Physician protected if reporting proves incorrect
Elder Abuse

• Occurs in older patients
• Physical abuse: pain or unnecessary restraint
• Sexual abuse: nonconsensual sexual contact
• Neglect or abandonment: failure to provide for needs
• **Psychological abuse**: infliction of emotional harm
  • Verbal insults or harassment
  • May present as **depression or withdrawal**
• **Financial exploitation**:  
  • Nonconsensual use of financial resources
Elder Abuse

• Reporting **mandatory** in most U.S. states
• Patients with injuries may be **admitted to hospital**
  • Provides protection from further harm
  • Allows time for social services intervention
Intimate Partner Violence

• Psychological, physical or sexual harm
• By a current or former partner or spouse
• Suggested by multiple, recurrent injuries and accidents
• Primary concern is safety of victim
  • Provider should be supportive
  • May be a difficult topic of discussion
  • Ask if patient feels safe at home
  • Ensure patient has a safe place in emergency
• Reporting only required in some US states
Intimate Partner Violence

Interviewing Patients

- Physician should be **nonjudgmental** and **compassionate**
- Physician uses open-ended questioning
- Questioning conducted in **private**
  - Ask others to leave for interview and exam
  - If others won’t leave: clue to possible IPV
- Physician should **assure confidentiality**
  - Unless grave danger exists which may mandate reporting
Driving

- Physicians often encounter “impaired drivers”
- Often elderly patients with vision, mobility disorders
- No uniform standard for reporting
- Widely varying rules by U.S. state
- Best answer often to discuss with patient/family
Driving

- Exception: **seizures**
- Most states require a seizure-free interval
  - i.e., 6 months, 1 year
- Often involves consulting with state DMV
Decision-Making Capacity

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Decision-Making Capacity

- Ability to comprehend information about illness and treatment options
- Ability to make choices in keeping with personal values
- Usually used regarding a specific choice
  - Example: patient has capacity to consent to surgery
- Required for informed consent
- Key component of ethical principle of autonomy
Competency

• **Legal judgment**
• Different from decision-making capacity
• Determined by a court/judge
• Clinicians can determine decision-making capacity
Decision-Making Capacity

• Understanding
  • Patient understands disease and therapy
• Expression of a choice
  • Patient clearly communicates yes or no
• Appreciation of facts
  • Related to understanding
  • Patient understands how disease/therapy affects him/her
• Reasoning
  • Compare options
  • Understand consequences of a choice
Decision-Making Capacity

• Patient is at least 18 years old or legally emancipated
• Decision remains stable over time
• Decision not clouded by a mood disorder
  • Suicidal patients may not decline hospitalization
• No altered mental status
  • Intoxication
  • Delirium
  • Psychosis
  • Depression
Decision-Making Capacity

- Can vary over time
- Illness may cause transient loss of decision-making capacity
  - Delirium
  - Untreated psychiatric illness
Intellectual Disability

- Patients with Down syndrome, Fragile X
- Does not automatically preclude decision making
- Disabled patient must meet usual requirements
  - Understanding
  - Expression of a choice
  - Appreciation of facts
  - Reasoning
Leaving AMA
Against Medical Advice

• **Assess decision-making capacity**
  • Patient must understand treatment options
  • Must understand consequences of decision

• **Give options for resuming care**
  • Can offer alternative treatment (e.g., outpatient meds)
  • Offer to resume care if patient desires
  • Offer follow-up care
Patients Who Lack Decision-Making Capacity

- Advance directives
- Surrogates
Advance Directives

- Instructions by patient in case of loss of capacity
- Two main types:
  - Living Will
  - Durable Power of Attorney for Health Care
Living Will

• Document of patient preferences for medical care
• Takes effect if patient terminally ill and incapacitated
• Usually addresses life support and critical care
• Often directs withholding of heroic measures
DPAHC
Durable Power of Attorney for Health Care

- Also called a Health Care Proxy
- Signed legal document
- Authorizes **surrogate** to make medical decisions
- Surrogate should follow patient’s wishes
- Answer question: “What would patient want?”
Absence of Advance Directive

• Some states recognize **oral or spoken statements**
• Reliable, repeated statements by patient about wishes
• Usually must be witnessed by several people
Surrogate Designation

- Used when no advance directives available
- Make decisions when patient loses capacity
- Determine what patient would have wanted
- If no power of attorney:
  - #1: Spouse
  - #2 Adult children
  - #3: Parents
  - #4: Adult siblings
  - #5: Other relatives
Brain Death

- Permanent absence of brain functions
- Brain death = **legally dead** in the United States
- Life support may be withdrawn
- Even over surrogate or family objections
Public Health

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Primary Prevention

- **Prevents disease** from occurring
- Immunizations
- Folate supplementation in pregnancy
Secondary Prevention

- **Prevent disability**
- Detect and treat early, ideally when asymptomatic
- Most **screening** programs
- Mammograms
- Pap smears
- Colonoscopy
Tertiary Prevention

- Prevents long-term disease complications
- **Maximize remaining function**
- Cardiac or stroke rehabilitation programs
- Support groups
- Chronic disease management
Quaternary Prevention

- Prevents **overtreatment** or harm from treatment
- Many examples of overuse in U.S. medicine
  - Blood tests
  - Radiology tests
  - Coronary procedures
- Ensure appropriate use
U.S. Healthcare

- Healthcare is expensive ($$$)
- Few patients pay out of pocket
- Major insurance options:
  - Medicare
  - Medicaid
  - Private insurance
Emergency Care

- Must always be provided regardless of insurance
- After patient stable, insurance can be discussed
Medicare

- Federal program administered by US government
- Paid for by Federal U.S. taxes
- Provides health insurance for:
  - Patients over 65 years of age
  - Disabled
  - Patients on dialysis
Medicare

- Part A
  - Hospital payments
- Part B
  - Outpatient treatment
  - Clinic visits, diagnostic testing
- Part D
  - Prescription drug coverage
Medicare

• Part C
  • Special option that patients may select
  • Pays private insurer to provides healthcare
Medicaid

• Jointly funded by state and federal governments
  • Some $$ from Federal government
  • Some $$ from State governments
• Administered by states
• Health insurance for **low-income patients/families**
Private Insurance

• Often provided by **patient’s employer**
  • Employer pays fee to insurance company
  • Insurance company pays costs of medical care
• Expensive for employer
• Helps to attract skilled workers
• Several types of plans that vary in features/cost
  • Health Maintenance Organization (HMO)
  • Preferred Provider Organization (PPO)
  • Point of Service plan (POS)
Private Insurance

• **Health Maintenance Organization (HMO)**
  • Insurance companies hires providers
  • Must use HMO providers - limited choice of physicians
  • Less expensive
Private Insurance

• **Preferred Provider Organization (PPO)**
  • Patient may see any physician
  • “In network” physicians have a lower co-pay
  • Most expensive plan
  • Most flexible plan
Private Insurance

• **Point of Service plan (POS)**
  • Middle option between HMO and PPO
  • “Gatekeeper model”
  • Patient must choose POS plan primary care doctor
  • Visits with other physicians require referral
  • In network and out of network visits with differing co-pays
Payment Types

• Fee for service
  • $100 per clinic visit

• Salary
  • $100,000 per year → doctor must see all patients

• Capitation
  • **Set fee** paid to physician/hospital per patient/illness
  • Spends LESS than fee → make money
  • Spends MORE than → loses money
  • Financial risk transferred to physician/hospital
Affordable Care Act

- Enacted in 2010
- Expands Medicaid coverage
- Establishes exchanges
- Uninsured patients may purchase private healthcare
Triple Aim
Institute for Healthcare Improvement

• Improve the patient’s experience of care
• Improving the health of populations
• Reducing the per capita cost of health care
Accountable Care Organization

- Groups of health-care practitioners (e.g., physicians, nurses)
- Voluntarily join together to receive payments from third-party payers
- Groups are held “accountable”
- Agree to payments based on quality metrics
- Higher payments if high percentage of patients receive vaccinations
- Higher payments if high percentage of diabetic patients receive eye exams
Patient-Centered Medical Home

- Team of care providers – doctors, nurses, social workers, pharmacists
- Provide coordinated care for patients and families
- Easily accessible
- Committed to quality and safety
Palliative Care

• Specialized medical care for patients with serious illnesses
  • Cancer, CHF, COPD, dementia, CVA
• Focus on **improving quality of life**
• Can be provided alongside curative medical treatments aimed at life prolongation
• Symptom management focus: pain, nausea, vomiting, anxiety, stress
• Often a team approach: physician, nurse, social worker, others
• Primary palliative care = provided by the patient’s regular doctors
• Secondary palliative care = provided by specialists in palliative care
  • Often fellowship trained and/or board certified in hospice and palliative medicine
Hospice

- Subset of palliative care at end of life
- Services provided at home or in a facility
- Requires expected survival $\leq 6$ months
Palliative Care and Hospice

Adapted from:
Quality

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Quality

• **Institute of Medicine** definition: “the degree to which health care services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge”
Quality
IOM Domains

- **Effectiveness**: achieving outcomes supported by scientific evidence
- **Efficiency**: maximizing quality of care delivered
- **Equity**: providing care of equal quality to all
- **Patient centeredness**: meeting patient needs and preferences
- **Safety**: avoids actual or potential bodily harm
- **Timeliness**: minimizing delays
Quality Measurements
Process versus Outcome

• **Process measurement**
  • Rates of immunization
  • Rates of DVT prophylaxis

• **Outcome measurement**
  • Rates of infection
  • Rates of DVT
  • Mortality
Quality Measurements

Common Hospital Metrics

• Readmissions
• Pressure ulcers
• Surgical-site infections
• Central-line infections
• Ventilator-acquired pneumonia
• Deep vein thrombosis
Hospital Readmission

- Patient X discharged from hospital
- Ten days later, patient X admitted again
- Readmission rate used as a quality indicator
- High readmission rate may be due to:
  - Patient discharged too early
  - Patient not educated prior to discharge
  - Follow-up not scheduled
Hospital Readmission

Agency for Healthcare Research and Quality (AHRQ), Center for Delivery, Organization, and Markets, Healthcare Cost and Utilization Project (HCUP), 2010-2016 Nationwide Readmissions Database (NRD)
### Hospital Readmission

**30-day All-Cause Hospital Readmissions**

**Most Common Conditions**

<table>
<thead>
<tr>
<th>Medicare</th>
<th>Medicaid</th>
<th>Private Insurance</th>
<th>Uninsured</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heart Failure</td>
<td>Mood Disorders</td>
<td>Chemotherapy</td>
<td>Mood Disorders</td>
</tr>
<tr>
<td>Sepsis</td>
<td>Schizophrenia</td>
<td>Mood Disorders</td>
<td>Alcoholism</td>
</tr>
<tr>
<td>Pneumonia</td>
<td>Diabetes</td>
<td>Surgical Complications</td>
<td>Diabetes</td>
</tr>
</tbody>
</table>

Healthcare Cost and Utilization Project. *Conditions With the Largest Number of Adult Hospital Readmissions by Payer*. April 2014
Hospital Readmission Prevention

- **Discharge planning**
  - Clear, understandable instructions for patient
  - Post-discharge services
  - Follow-up appointments
- **Medication reconciliation**
  - Review all discontinued and new medications
  - Ensure prescriptions given and can be picked up
- **Discharge checklist**
- **Post-discharge phone calls**
- **Home visits**
Hospital Readmission

Team Approach

• Case manager – care coordinator
  • Works with insurance companies, home nursing agencies, etc.
• Physical and occupational therapist
  • Physical therapy: movement and strength
  • Occupational therapy: activities of daily living
• Social worker – helps patient and families
  • Education, coordination
  • Psychosocial issues
• Nurse
• Physician
Teach Back Method

- Instructions given to patient
- Patient asked to “teach back” using their own words
- Commonly used method for discharge instructions
- May uncover misunderstandings
Pressure Ulcers

- Immobile hospitalized patient: ↑ risk skin breakdown
- Can lead to pressure ulcers (usually sacral)
- Causes pain, risk of infection
- Preventative measures
  - Daily skin checks
  - Special mattresses to redistribute pressure
  - Early identification and care for skin breakdown
Surgical Site Infections

• Post-surgical infection
• Often superficial skin infection (cellulitis)
• Can also be deep tissue or organ infection
• Can result from poor sterile technique
• Pre-operative antibiotics in appropriate patients
Central Line Infections

- Central line insertion can lead to bacteremia
- Can occur due to poor sterile technique
- Gram-positive skin organisms most common
- Staph epidermis and staphylococcus aureus
- More common with catheters in femoral vein
- Least common with catheters in subclavian vein
- Internal jugular vein intermediate risk
- Increased risk with prolonged insertion
VAP
Ventilator-acquired Pneumonia

• Pneumonia after patient placed on ventilator
• May be due to hospital factors
  • Failure to elevate head of bed
  • Poor oral care in intubated patients
DVT
Deep Vein Thrombosis

- Immobile, bed-bound patients = ↑ risk thrombus
- Hospitals can use preventative measures
- ↑ rates of DVT may be due to poor hospital practices
- Methods of prevention:
  - Early ambulation
  - Intermittent pneumatic compression
  - Subcutaneous heparin
  - Low-molecular-weight heparin (Enoxaparin)
Physician Quality Measurements

- Diabetic patients
  - Foot exams
  - Eye exams
- Systolic heart failure patients
  - ACE inhibitors
- Immunizations
Safety

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Operating Room Safety
Types of Errors

- **Action-based errors**
  - Needle inserted into wrong blood vessel
  - Avoided by practice and standardized techniques

- **Decision-based errors**
  - Knowledge-based or judgement errors

- **Communication-based errors**
  - Avoided by preoperative briefing of team
Never Events

• Events that should never happen – no exceptions
• Some examples:
  • Surgery on the wrong site
  • Surgery on the wrong patient
  • Wrong surgical procedure performed
  • Foreign object left inside patient during surgery
  • Administration of incompatible blood
Wrong Site Surgery
Prevention

• **Verification**
  • Of correct patient, site and procedure at all stages
  • When the procedure is scheduled
  • Entry in to operating room
  • Immediately prior to starting procedure

• **Marking**
  • Of operating sites
  • Ideally by operating surgeon
  • Ideally when patient is awake to confirm
  • Verified *independently* by each operator
Operating Room Safety

Time Out

• Pause before a medical/surgical procedure
• Patient, physician, nurses, staff all present
• All must agree on patient name, type of procedure
• Verify side, site, and other details
• All team members must agree to proceed
Operating Room Safety

Checklists

• Concept from airline industry
• Series of steps that must be done prior to procedure
• Shown to reduce many adverse events
  • Central-line infections
  • Surgical-site infections
• Used in operating rooms and other locations

Shown to reduce many adverse events
Medication Errors

Medication Reconciliation

- Process of identifying most accurate list of meds
  - Name, dosage, frequency, route
- Often done at care transitions
  - Admission to hospital
  - Admission to nursing home
Antimicrobial Stewardship

• Hospital program
• Monitors use of antibiotics
• Goals:
  • Prevent emergence of drug-resistant bacteria
  • Promote appropriate use of antibiotics
• Often monitors:
  • Prescribing patterns
  • Microbiology culture results and sensitivities
Infection Control Precautions

• Patients with certain infections need “precautions”
• Taken to prevent spread of disease
• Four basic types of precautions:
  • Standard Precautions
  • Droplet Precautions
  • Contact Precautions
  • Airborne Precautions
Standard Precautions

- Hand washing
- Gloves when touching blood, body fluids
- Surgical mask/face shield if chance of splash/spray
- Gown if skin or clothing exposed to blood/fluids
Contact Precautions

• Patients with infections easily spread by contact
• Gloves, gown
• Key pathogens
  • Any infectious diarrhea (norovirus, rotavirus)
  • C. difficile
  • MRSA
Droplet Precautions

• Patient with infection that spreads by large droplets (> 5-10 μm)
• Spread via speaking, sneezing, or coughing
• Facemask, gloves and gown
• Key pathogens:
  • Respiratory viruses, especially influenza, RSV
  • Neisseria meningitides
Respiratory Precautions

Airborne/TB precautions

- Patients with infections spread by airborne route
- Particles < 5μm in diameter
- Fit tested mask or respirator
- Gloves, gown
- Key pathogens
  - **Tuberculosis**
  - Measles
  - Chickenpox
COVID19

• Primarily spread via **contact and droplets**
• Possible spread via airborne route in certain medical procedures
• WHO: droplet and contact precautions in most circumstances
• Airborne precautions during aerosol generating procedures
  • Endotracheal intubation
  • Bronchoscopy
  • Open suctioning
  • Non-invasive positive-pressure ventilation
  • Cardiopulmonary resuscitation
Root Cause Analysis

- Method to analyze serious adverse events (SAEs)
- Identifies direct cause of error plus contributors
- Example:
  - Wrong drug administered to patient
  - Physician error?
  - Nursing error?
  - Labels hard to read: Printing error?
  - Nurses rushed: Hospital error?
Failure Mode & Effects Analysis

- Identifying how a process might fail
  - Root cause analysis done **BEFORE** adverse event happens
- Identifying effects of potential failure
- Break process down into components
- Look for failure/effect of each component
Types of Errors

- **Active errors**
  - Occur at the end of a process
  - Frontline/bedside operator error

- **Latent errors**
  - Errors away from bedside that impact care
  - Example: poor staffing leads to overworked nurses
Adverse Events

Terminology

- Preventable
- Non-preventable
- Ameliorable
  - Not preventable but severity could have been reduced
- Near miss
  - Error committed but not harm occurred
- Commission error
  - Action caused harm
- Omission error
  - Failure to act caused harm
Swiss Cheese Model

• Flaws at multiple levels align to cause serious errors
• Often more than just a single mistake
  • Institutional factors
  • Supervisor errors
  • Environmental factors
  • Individual error
PDSA
Plan-Do-Study-Act

• **PLAN**: Plan a change in hospital practice
• **DO**: Do what you planned
• **STUDY**: Study the outcome. Did things get better?
• **ACT**: Act on the study findings
• PDSA “cycles” repeated
• Generates continuous improvement
PDSA Example

- Too many surgical site infections
- **Plan** to mandate double hand washing
- Implement plan (**Do**)
- **Study** effects on surgical site infections
- **Action** taken based on results
Triggers and Rapid Response

- Patients that “crash” often have signs of impending decline hours before
- Triggers: Patient events that mandate response
  - New chest pain
  - Low oxygen saturation
- Rapid Response Team
  - Provider group
  - Responds to triggers with formal assessment
Forcing Functions

• “Force” an action beneficial for safety
  • Cannot order meds until allergies verified

• **Workaround**
  • Obtain meds without using ordering system
  • Potential for harm
Human Factors Design

• **Design of systems** that accounts for human factors
  • How humans work and function
  • How humans interact with system
• Failure to account for human nature → errors
Human Factors Design

- Standardization
  - Same procedures followed throughout hospital

- Simplification
  - Fewer steps $\rightarrow$ less chance for error

- Forcing functions
  - Cannot only interact with system in one way
Culture of Safety

- Safety as priority for organization
- Teamwork
- Openness and transparency
- Accountability
- **Non-punitive** responses to adverse events/errors
- Education and training
High Reliability Organization

- Organizations that operate in hazardous conditions
  - High potential for error
- Fewer than average adverse events
Bad News

Serious News

• Information that alters a patient’s view of his or her future
• Causes behavioral or emotional change that persists
• Varies based on patient belief and perception
SPIKES Model

- Model for delivery of **bad news**
- Developed for patients with cancer
- Several society guidelines based on this model
- Other similar models also used
  - SHARE
  - ABCDE
  - GUIDE
  - BREAKS
SPIKES Model

- Setting
- Perception
- Invitation
- Knowledge
- Emotions and Empathy
- Strategy and Summary
Setting

- Create a quiet, comfortable setting
- Set aside adequate time
- **No interruptions**
  - Silence pagers or cell phones
- Patient may request friends/family
- Sometimes only family present (“Family meeting”)
- Introduce all team and family members
- Interpreter may be required
Perception

- Start conversation by asking the patient **what they know already**
- Active listening: eye contact, open posture, leaning in
- “What is your understanding of your condition?”
- “What have your other doctors told you so far?”
- “What do you know about your CT scan?”
Invitation

• How would the patient like the information disclosed?
• How much detail?
Knowledge

- “Warning shot:” warn patient or family that serious news is coming
- “I have some difficult news to tell you about your biopsy”
- Use nontechnical words
- Avoid jargon
- Give information in small chunks
- Stop and check for understanding
- Can ask patient/family to repeat back information
Be Clear

- Too often patients/families confused by physicians
- Good examples:
  - “I believe that your mom is dying”
  - “There is no cure for this condition”
- Bad examples:
  - “Her pulmonary situation is not improving“
  - “The cardiomyopathy has not improved”
Emotions and Empathy

- Validate emotions as they arise
- Silence is okay
Strategy and Summary

• Discuss the plan for next steps
• Summarize the discussion
• Check understanding
• Can ask patient to repeat back information
Concerning findings (abnormal lab, unexplained weight loss)
Possibility of serious disease or benign outcome
Assess patient’s understanding
Review results in clear language

**Clearly state the level of uncertainty**
- Okay to emphasize that serious diagnosis may exist
- Should also emphasize that nothing is definite
- Do not need to list all potential diagnoses

Recommend follow-up
Solicit questions