

# Beneficence Principles

Ethical Framework for Healthcare and Research

## Five Core Principles



Do No Harm



Patient Benefit



Risk-Benefit  
Analysis



Unintended  
Consequences



Precautionary  
Principle



# Do No Harm (Primum Non Nocere)

## Definition & Core Concept

The principle of "Do No Harm" is the foundational tenet of medical ethics, derived from the Latin phrase "Primum non nocere" (First, do no harm). This principle obligates healthcare professionals to avoid causing injury or suffering to patients through their actions or inactions.

It emphasizes that the primary responsibility of any intervention is to ensure that it does not worsen the patient's condition or create new problems. This principle requires practitioners to carefully weigh every decision against potential harm.

## Key Applications

- ✓ Avoiding unnecessary medical procedures or treatments
- ✓ Minimizing side effects and complications
- ✓ Proper dosing and medication management
- ✓ Preventing medical errors through protocols
- ✓ Ensuring patient safety in all healthcare settings
- ✓ Recognizing when to withhold treatment

## Visual Framework



### Healthcare Action

Proposed treatment or intervention



### Safety Assessment

Evaluate potential harm



### Safe Implementation

Proceed only if harm-free



## Clinical Example

A patient presents with mild back pain. While surgery could be an option, it carries significant risks including infection, nerve damage, and prolonged recovery. Following the "Do No Harm" principle, the physician first recommends conservative treatments like physical therapy and pain management, reserving surgery only if these safer options fail.



# Patient Benefit

## Definition & Core Concept

The Patient Benefit principle mandates that all healthcare interventions should be designed and executed with the primary goal of improving the patient's health, well-being, and quality of life. This goes beyond merely avoiding harm to actively seeking positive outcomes.

This principle requires healthcare providers to act in the best interests of their patients, considering not just physical health but also emotional, psychological, and social well-being. It emphasizes patient-centered care and individualized treatment approaches.

## Key Applications

- ✓ Prioritizing treatments that maximize health benefits
- ✓ Considering quality of life alongside life extension
- ✓ Respecting patient values and preferences
- ✓ Providing evidence-based care
- ✓ Ensuring equitable access to beneficial treatments
- ✓ Supporting patient autonomy in decision-making

## Holistic Patient Benefit Model



### Physical Health

Disease treatment, symptom relief



### Mental Well-being

Emotional support, psychological care



### Social Function

Relationships, community integration



### Quality of Life

Overall satisfaction, meaning



### Clinical Example

An elderly cancer patient faces a choice between aggressive chemotherapy that might extend life by a few months but with severe side effects, or palliative care focusing on comfort and quality of life. The healthcare team discusses

both options thoroughly, considering not just survival time but the patient's values, family relationships, and desired quality of life, ultimately supporting whatever decision best serves the patient's overall benefit.



## Risk-Benefit Analysis

### Definition & Core Concept

Risk-Benefit Analysis is a systematic evaluation process that weighs the potential risks of a medical intervention against its potential benefits. This principle recognizes that virtually all medical treatments carry some level of risk, and decisions must be made by carefully balancing these risks against expected positive outcomes.

This analytical approach requires quantifying both risks and benefits when possible, considering probability and severity of

### Key Applications

- ✓ Evaluating new drug therapies and treatments
- ✓ Assessing surgical versus non-surgical options
- ✓ Determining appropriateness of diagnostic tests
- ✓ Research protocol approval decisions
- ✓ Resource allocation in healthcare systems
- ✓ Emergency intervention decisions

outcomes, and ensuring that the potential benefits substantially outweigh the risks before proceeding with any intervention.

## Risk-Benefit Balance Scale



### RISKS

- Side effects
- Complications
  - Cost
- Time investment



### BENEFITS

- Health improvement
- Symptom relief
- Life extension
- Quality of life

## Clinical Example

A patient with atrial fibrillation must decide whether to take anticoagulant medication. The benefits include a 70% reduction in stroke risk, potentially preventing severe disability or death. The risks include a 2-3% annual risk of

significant bleeding. After thorough risk-benefit analysis considering the patient's specific factors (age, fall risk, other conditions), the healthcare team recommends anticoagulation as the benefits substantially outweigh the risks in this case.



## Unintended Consequences

### Definition & Core Concept

The principle of Unintended Consequences emphasizes the need to anticipate and monitor for unexpected outcomes that may arise from medical interventions, policies, or healthcare decisions. These consequences can be positive, negative, or neutral, but they were not the primary aim of the action taken.

This principle requires healthcare providers and researchers to think systematically about potential ripple effects of their decisions,

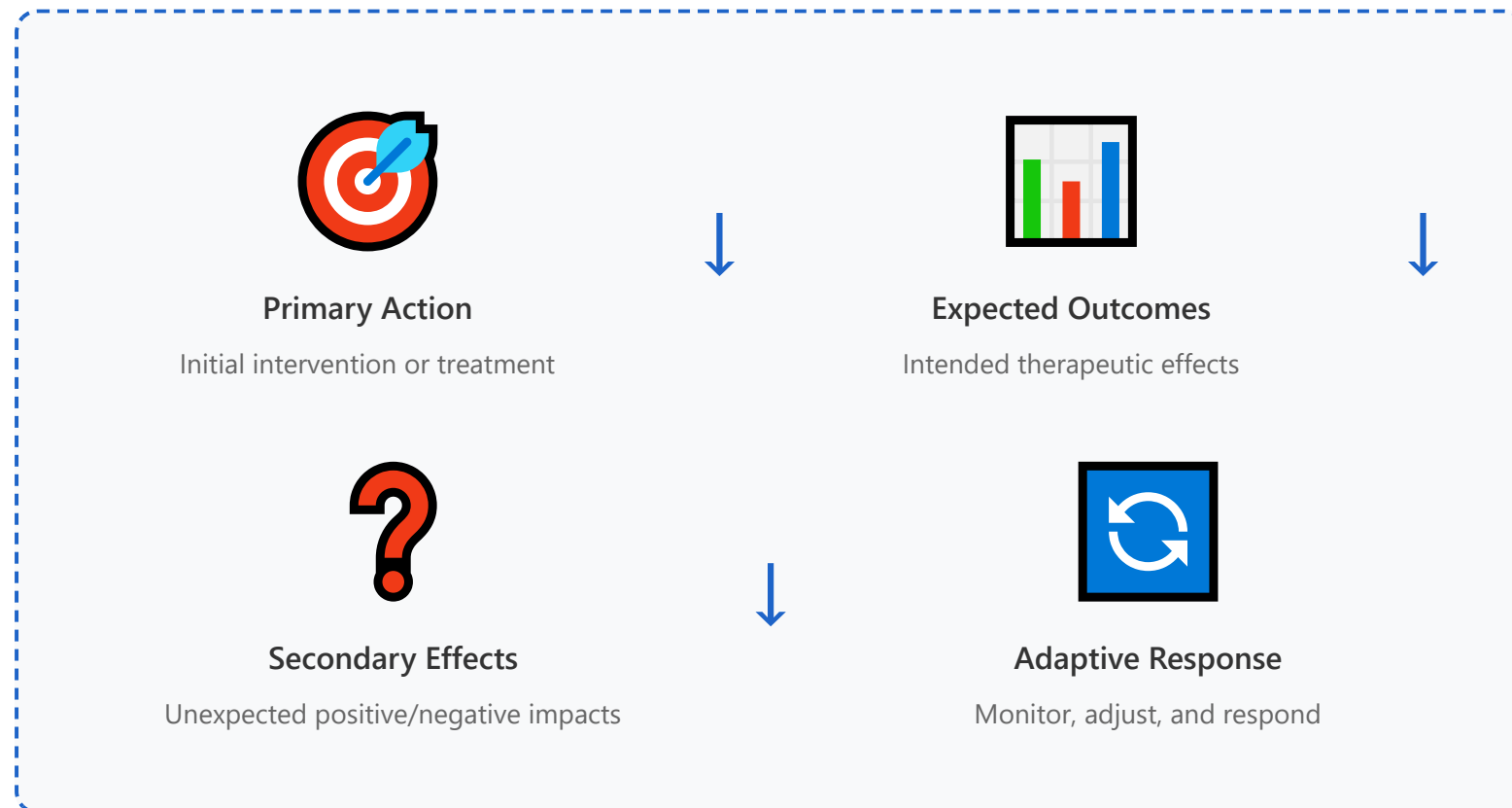
### Key Applications

- ✓ Monitoring for unexpected drug interactions
- ✓ Tracking long-term effects of new treatments
- ✓ Evaluating healthcare policy implementations
- ✓ Assessing cascade effects in healthcare systems
- ✓ Identifying psychological impacts of treatments
- ✓ Recognizing social and economic consequences



considering not just immediate outcomes but also secondary and tertiary effects on patients, communities, and healthcare systems. It emphasizes the importance of ongoing monitoring and adaptive response.

## Cascade of Consequences





## Clinical Example

A hospital implements a new electronic prescription system to reduce medication errors (intended consequence). While errors decrease, an unintended consequence emerges: physicians spend significantly more time on data entry, reducing time with patients. Another unintended positive consequence: the system reveals patterns of overprescribing that lead to improved antibiotic stewardship. The hospital must now address the time burden while capitalizing on the unexpected insights.



## Precautionary Principle

### Definition & Core Concept

The Precautionary Principle states that when an action or policy has the potential to cause serious or irreversible harm to patients or the public, the absence of full scientific certainty should not be used as a reason to postpone

### Key Applications

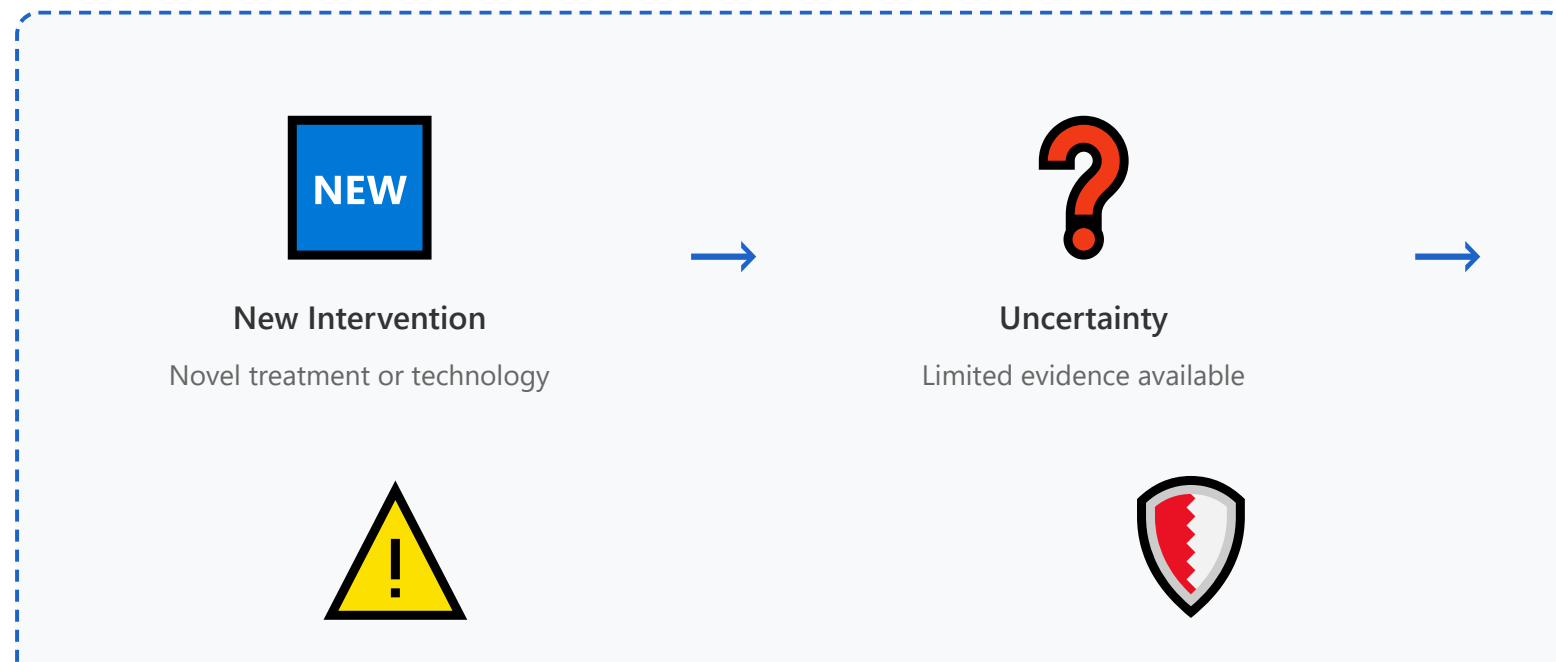
- ✓ Evaluating novel medical technologies
- ✓ Establishing safety protocols for new procedures

preventive measures. This principle advocates for proactive action in the face of uncertainty.

It emphasizes erring on the side of caution, particularly when dealing with new technologies, novel treatments, or situations where the potential for serious harm exists. The principle requires decision-makers to consider worst-case scenarios and implement safeguards even before complete evidence is available.

- ✓ Public health emergency responses
- ✓ Environmental health hazard assessment
- ✓ Pharmaceutical safety monitoring
- ✓ Genetic therapy and modification oversight

## Precautionary Decision Framework



### Potential Harm

Risk of serious consequences



### Precautionary Action

Implement safeguards first



### Clinical Example

During the early stages of the COVID-19 pandemic, scientists observed the virus spreading rapidly but lacked complete understanding of transmission mechanisms. Applying the Precautionary Principle, public health officials recommended masks, social distancing, and hand hygiene before definitive studies confirmed these measures' effectiveness. This cautious approach, despite initial uncertainty, likely saved countless lives while research continued to build the evidence base.