



# The SKH Continuous Hip Fracture Improvement Project (CHIP)



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## Background/ Aim

**Early surgery (within 48 hrs)** in hip fracture patients confers lower mortality risk, fewer complications and shorter hospital stays.

Causes for delays include:

- 1) Patient conditions
- 2) Surgical/anaesthetic processes
- 3) Available hospital facilities



**CHIP aims to improve key metrics like inpatient length of stay and time to surgery.**



## Methods

Analysis for causes of delays in surgery was performed and were found to cluster around specific patient groups.

A series of quality improvement initiatives was introduced by the **orthopaedic surgical team, anaesthesiology and geriatric medicine** in a coordinated fashion.



The initiatives were conducted over **3 PDSA cycles** from 2021 to 2023.

**PDSA Cycle 1**  
July 2021

Incorporating **earlier preoperative anaesthesia assessment** into surgical pathway enabled longer lead times to conduct medical optimisation and specialist review/risk stratifications before surgery.

**PDSA Cycle 2**  
March 2023

Regular broadcast of a curated patient list, statistics & commentary designed to confer **situational awareness** and **sense of urgency** in teams.

**PDSA Cycle 3**  
July 2023

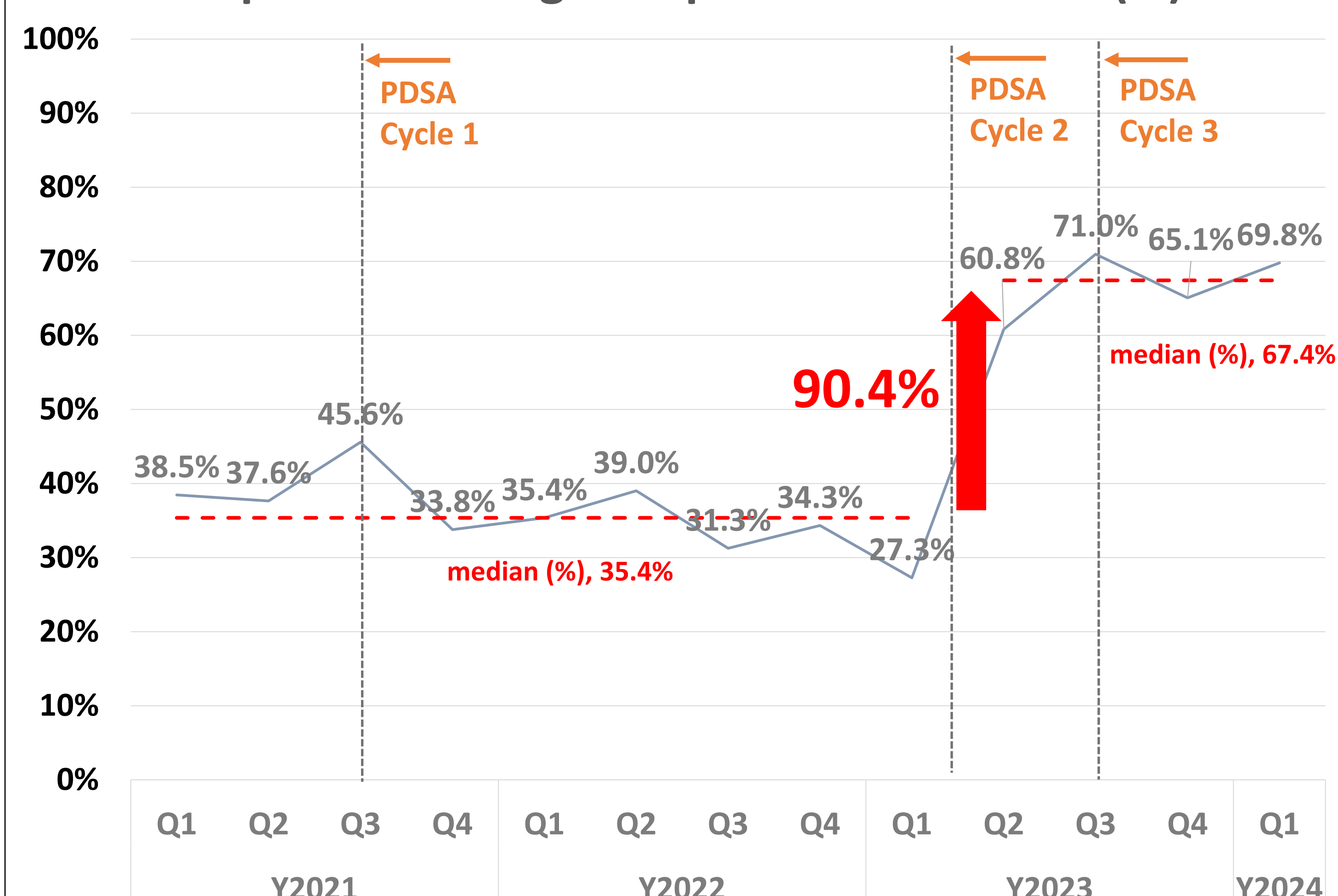
**Physical cohorting** of hip fracture patients to standardise, streamline and co-locate care processes and personnel, including timely post-operative patient right siting.

## Results

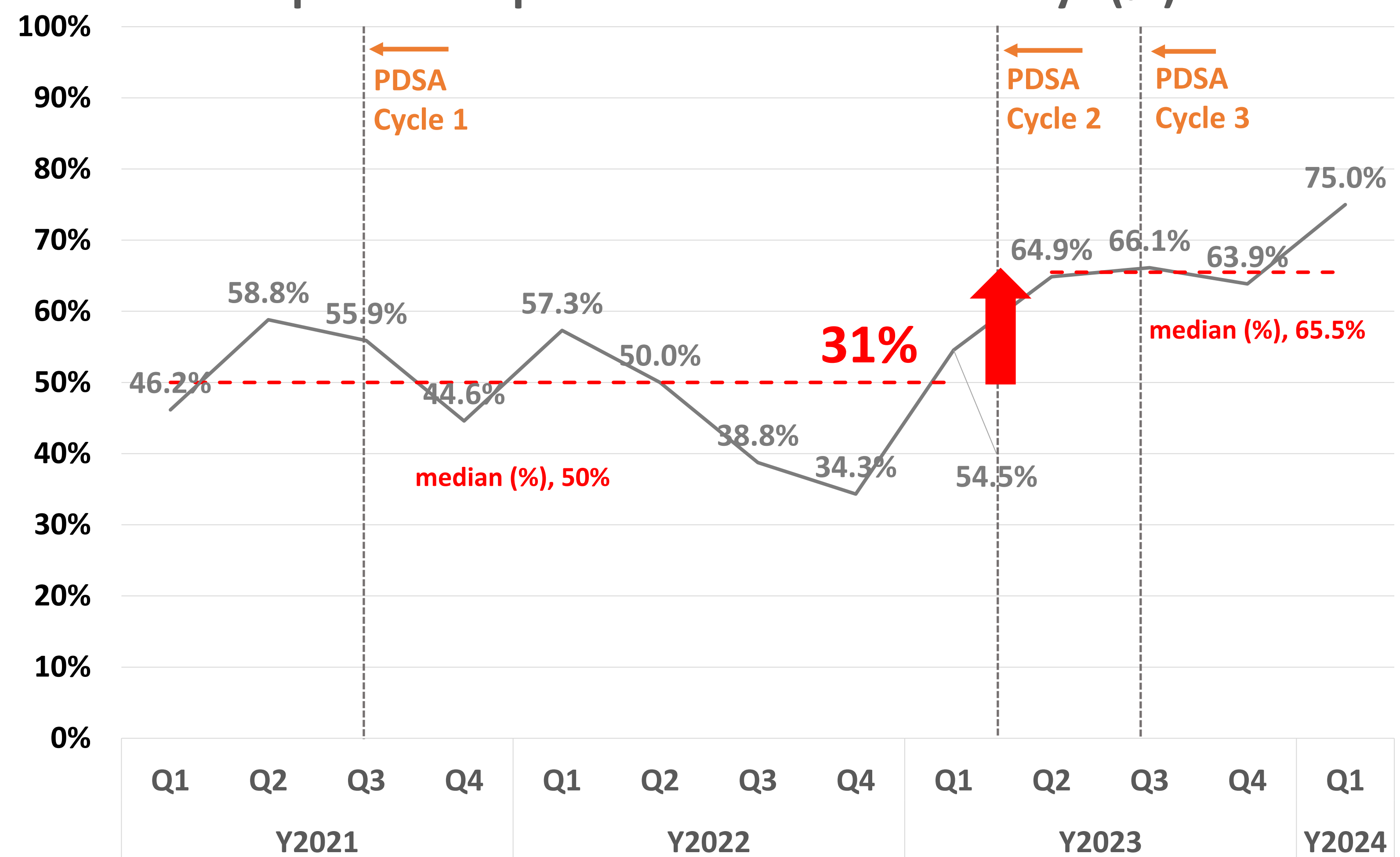
Patients undergoing hip fracture surgeries within 48 hours **improved by 90.4%**, from pre-implementation of median of 35.4% to 67.4% post-implementation.

Significant improvement (**31%**) in the proportion of patients with hospital length of stay of less than 10 days was also reported, from pre-implementation of median 50% to post-implementation of 65.5%.

**Hip fracture surgeries performed ≤ 48hrs (%)**



**Hip fracture patients with LOS ≤ 10 days (%)**



## Conclusion / Future plans

**Targeted interventions** and a **multidisciplinary team approach** to hip fracture management ensures **timely surgery, improved perioperative care outcomes** and **early discharge**, and **reduces overall healthcare costs**.