

ADVANCED SURGICAL TOOL RETRIEVAL ARM

## BACKGROUND

Personnel shortages in operating rooms lead to **surgical delays and cancellations**, straining hospital efficiency and compromising patient outcomes. Especially in under-resourced areas, delays limit access to timely, quality care and contribute to **clinician burnout, decreased efficiency, and financial strain on hospitals.**



**3.2 M**  
CURRENT DEFICIT OF  
HEALTHCARE WORKERS

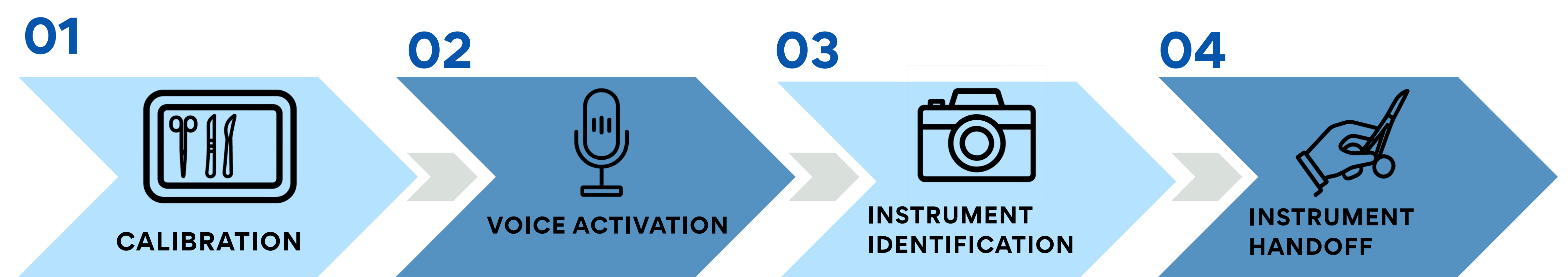


**\$24 B**  
COST TO HOSPITALS SINCE 2020  
DUE TO STAFFING SHORTAGES

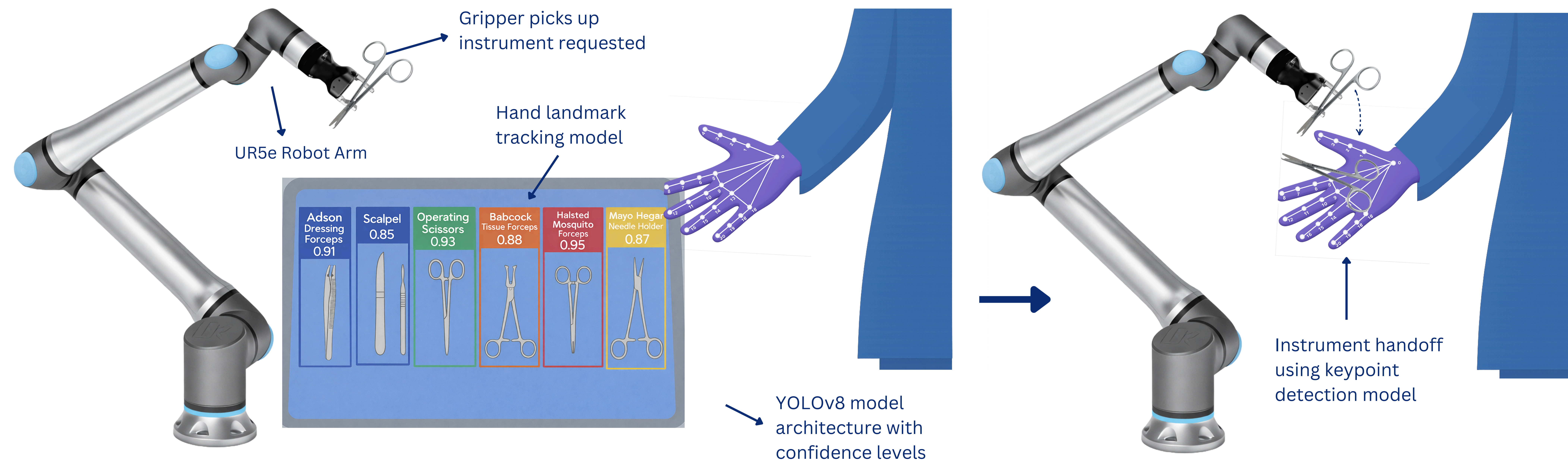
## OPPORTUNITY

Surgical care providers **need a method of manipulating a variety of instruments during surgical intervention** in order to minimize delays caused by personnel shortages.

## WORKFLOW



## SOLUTION



The Advanced Surgical Tool Retrieval Arm (ASTRA) robot **optimizes the intraoperative workflows and manages surgical instrumentation.** ASTRA reduces the need for human hands in repetitive tasks, enabling surgeries to proceed without unnecessary delays and improving overall outcomes.