



Patient Safety Initiative: Surgical Sponge Tracking

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BACKGROUND

Surgical sponges retained inside patients' bodies following surgery is a major medical concern – as voiced by WHO and many global studies

- Global statistics reveal that a surgical sponge is left inside a patient in **1 out of 6000** surgeries
- **3 external cases seen last quarter** from other hospitals who underwent surgery at KIMSHEALTH to remove it
- The current process to account for surgical sponges is **manual counting** which is prone to human error
- Longer operations run through many packs of surgical sponges which **exponentially increases this risk**
- **Dependent on OT staff's** diligence and experience
- Retained sponges leads to **pain and infection**
- We felt the **dire need to solve this using technology**



THE INNOVATIVE SOLUTION

KIMSHEALTH has pioneered for **the first time in India**, a **patient safety initiative** leveraging technology to prevent such occurrences. We have digitized and automated the process of identification and monitoring of surgical sponges.

- Implemented **barcoding** for unique identification of surgical sponges and packs before sterilization
- **Scan-in** of both packs and individual sponges pre-surgery into the software
- **Scan-out** the sponges post-surgery before closing the patient
- **Error-free and accurate tracking** of every sponge entering and exiting an OT

The screenshot shows a web browser with the URL `v4s-pwa-stg.seemymachines.com/surgical_sponge`. The page has a blue header with a 'Back' button and a 'Create Pack' button. Below the header, there is a form with the following fields:

- Pack ID**: A text input field containing the value 'P-4501'.
- Add Sponge**: A text input field.

Below the form, there is a table with the heading 'Sponges'.

Sl No	Sponge ID
1	S-5203
2	S-5202
3	S-5201
4	S-5200

At the bottom of the form, there are two buttons: 'Back' and 'Pack'.



SIMPLE PROCESS – SIGNIFICANT BENEFITS

11:26 AM Google SeeMyAssets New tab
v4s-pwa-stg.seemymachines.com/surgical_sponge

< Back Create Pack

Pack ID *
P-4501

Add Sponge

Sponges

Sl No	Sponge ID
1	S-5203
2	S-5202
3	S-5201
4	S-5200

Back Pack



< Back OT Exit

Surgery ID : Ent

Total Packs 1	Total Sponges 4	Used 2	Unused 2	Pending 0
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Sponge ID
 ☐ Used ☒ Unused

Sponges

Sl No	Pack ID	# of sponges	Sponge IDs	Status
1	P-2000	4	S'2318 S-2041 S-2040 S-2037	Used Used Unused Unused

Back Mark Exit

ADVANTAGES

- **Improves safety of every patient** that comes into the OT
- Completely **eliminates human errors**
- **Reduces time** - Allows surgeons to close more quickly as they are not waiting on a manual count and recount.
- **Very cost effective** solution
- **Easy implementation** in SaaS model which can be easily rolled-out to multiple OT's and smaller centres
- Solution model can be extended to other OT equipment.
Work is currently ongoing at KIMSHEALTH to achieve this

KIMSHEALTH is the first and only Hospital in India to pioneer and implement this technology

*USA Today reports that **less than 15%** of American hospitals use tracking technology on surgical sponges. Hospitals that use this technology have credited the system with eliminating retained sponge surgical errors entirely.*





THANK YOU

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KIMSHEALTH

We are a quaternary care hospital network offering end-to-end healthcare services, right from primary to quaternary care in India and Middle-east

- All specialties
- Cancer center
- Patient Mobile App
- Laboratory
- Radiology
- Pharmacy
- Tele-ICU
- Homecare
- Vaccinations
- Tele Medicine
- Nursing college
- DNB courses



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