

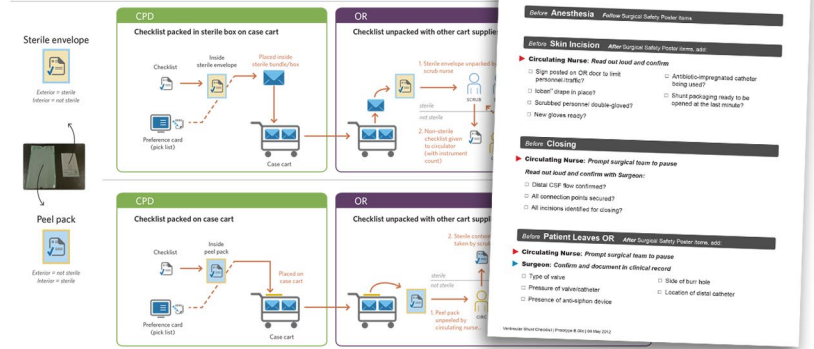
Explore a checklist intervention for neurosurgery



Delivery & Deployment

How can the right device-specific checklist be deployed to the right OR at the right time?

Leverage existing solution(s) for instruments and surgery-specific items:



Situation

The World Health Organization (WHO) surgical safety checklist had been integrated into the workflow at [confidential] hospital. However, there were a few types of surgeries for which the checklist did not work as well.

The client wanted to explore how a procedure-specific or device-specific checklist could be integrated with the main surgical safety checklist, and evaluate whether the addition could make patients more safe. Research indicated that ventriculoperitoneal shunt surgery was known to be associated with high complication risk due to mechanical issues and infection. The procedure itself was straightforward and involved a dedicated device cart — so the VP shunt procedure was identified as a target candidate to test the innovation.

How we helped

First, we conducted research to explore and document the physical environment of the neurosurgery suites, map surgical workflow, assess delivery and deployment options, and evaluate options for managing sterility.

We worked with the team to explore differences between procedure-specific checklists and device-specific checklists, and mapped strategies for ensuring how the right checklist would get to the right operating room at the right time. We then helped refine content for a VP shunt checklist and developed a simple and concise design.

Services provided

- Design research
- Process visualization and strategy maps
- Information design

Outcomes

- Delivered an analysis of potential delivery pathways exploring pros and cons of device-specific interventions
- Developed prototypes for trial and evaluation by health innovation research team