



# Digital Specimen Tracking

*Enhancing Efficiency and Patient Safety*

Innovation for Healthcare through Technology and AI

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## Navigating the Critical Journey of Digital Specimens in Healthcare

In the fast-paced world of healthcare, the accurate and timely handling of digital specimens, such as tumors and blood vials, is critical. These specimens are either transported within the same facility or sent out for external testing, often involving multiple handoffs along the way. Each transfer increases the risk of specimen loss, which can have severe and costly consequences for hospitals.

### What is a DIGITAL SPECIMEN?



A digital specimen refers to **tagged medical specimens** such as tumors, blood vials, and other biological specimens collected for testing, then scanned to create a **digital copy** within the **Pycube Software**. These specimens require meticulous handling, transportation, and tracking to ensure they arrive at their destination intact and under the necessary conditions. Monitoring digital specimens throughout their journey is essential for accurate diagnoses and timely patient treatment.

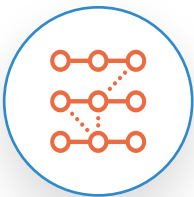


# THE CHALLENGE

## Preventing Mislabeled, Mishandled, and Lost Specimens

"The handling of specimens before reaching the pathology laboratory is referred to as the preanalytic phase. Surgical pathology involves processing multiple specimens collected and labeled by numerous people. There may be little or no automation in the preanalytic phase. The persons handling the specimens have various levels of training. As a result, there is great potential for error."

**The most common ways a specimen can be lost are:**



**Too many touchpoints**



**Temperature restrictions not being met, causing the specimen to expire**



**Set time limits expiring as the specimen is in transit, causing it to be unusable**



**Lack of system automation and tracking causing specimens to be mixed up or lost**



**Overlapping handwritten labels causing information to be jumbled or misread**

# Pycube Protection: Ensuring Full Visibility and Accountability in Transport

Pycube's Digital Specimen Solution gives you the security and confidence to know that your specimens are moving smoothly from their first to last destination.

Attach an RFID tag to the specimen, creating a digital asset within the Pycube Software.

1

The specimen will be scanned at every touchpoint, updating the Pycube Software, even during transit.

2

Once the specimen is delivered, you'll have the full transcript of the specimen's journey, allowing accountability from facility to facility.

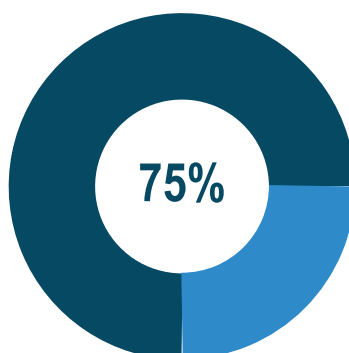
3

With accountability in place, you know exactly where to look if you check in on the specimen's progress and notice that it's stopped moving. This gives you the opportunity to quickly rectify the pause and get it back on track.

# The Unseen Costs of Lost Specimens



Financial loss, considering average cost associated with a single irretrievably lost specimen was estimated to be \$584.



Of all medical testing errors occur during pre-analytical phase with the majority happening before any specimen arrives at the laboratory

These include errors such as mislabeling specimens, delayed transportation, collection into the wrong specimen container, and inadequate specimen collection.

In the demanding world of healthcare, the accurate and timely handling of digital specimens is critical for patient care and operational efficiency. Mislabeling, mishandling, and losing specimens can have severe consequences, including compromised diagnoses and increased costs. Pycube's Digital Specimen Solution ensures complete visibility and accountability throughout the specimens's journey, from collection to analysis. By implementing advanced tracking and monitoring systems, hospitals can mitigate risks, enhance patient safety, and improve efficiency in specimen management.





## Want to Learn More? Contact Us!

Thank you for reading our eBook.

If you are interested in exploring solutions to protect your digital specimens from loss, we invite you to contact Pycube for further information and assistance.

Our team is ready to provide you with the support and expertise you need.