LIGHTHOUSE TIME STUDY:

69% Faster Abstraction and Higher Quality Data

Abstractors abstracted the same 40 CathPCI cases twice, once manually and once with Lighthouse. Every case was faster with Lighthouse.

Average time per case fell from 54.7 minutes to 16.8 minutes. Inter-rater reliability (IRR) was 98.3% for manual abstraction and 98.5% with Lighthouse on the same cases.

Manual CathPCI Abstraction

A manual CathPCI case takes **close to an hour.** An abstractor works through the EMR and the cath lab record to find the lesions, the devices, the medications, and the timestamps that the registry asks for.

The study measured **time per case and IRR** for the same cases, abstracted manually and with Lighthouse.

200
clinical questions are in a **typical CathPCI case.**

The study used **40 CathPCI cases** from the third quarter of 2026 at one large health system.

Two abstractors had already completed the cases manually in routine work, and their logged time set the baseline.

Two other abstractors then completed the **same 40 cases** with Lighthouse.

Same Cases, Abstracted Twice

Lighthouse had already read each chart and proposed answers to the registry questions, each with the supporting text from the record beside it. **The abstractors started from those answers and spent their time on the questions that needed clinical judgment.**

54.7 min — was the average time per case when abstractors **worked manually.**

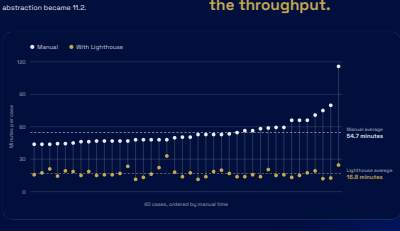
16.8 min — was the average time per case when abstractors **worked with Lighthouse.**

Every Case Was Faster

The slowest Lighthouse case took 33 minutes, and **the fastest manual case took 44.**

Manual times ran from 44 minutes to nearly two hours, while Lighthouse times stayed between 11 and 33 minutes. Across all 40 cases, 36.5 hours of abstraction became 11.2.

69% less time per case with Lighthouse, which is **more than three times the throughput.**



IRR by Method

98.3%
Manual abstraction
Manual abstraction of the same cases had 24 errors.

98.5%
Abstractor with Lighthouse
Abstractors who started from Lighthouse's answers had 21 errors, in a third of the time.

These scores come from IRR review of the same seven cases, covering more than 1,400 data elements.

What the Review With Lighthouse Found

The original manual IRR review of these seven cases found 5 errors. When the same cases were reviewed again with Lighthouse, **the review found 24.** Lighthouse places the supporting text for every answer in front of the reviewer.

Finding more errors means higher quality data goes into the registry. If only the 5 errors from the manual review had been corrected, 19 errors would have remained in the submitted data.

Both scores above come from the review with Lighthouse.

Errors found by the IRR review with Lighthouse: **24**

Errors found by the original manual IRR review: **5**

Both reviews covered the same seven cases.

Time Saved at the Study Site

The study site abstracts about **160 CathPCI cases a month.**

Roughly 100 abstractor hours would be saved at the study site each month, if the saving held on every case.

"I'm really, really impressed, and frankly shocked by how well Lighthouse is handling the Lesions and Devices because the physician documentation can be so complicated."

CathPCI abstractor

How to Read These Results

This was a small study at one health system, on one registry. Different abstractors did the manual and the Lighthouse work. Manual times came from time records kept during routine production, where a single entry often covered several cases and was averaged across them. Lighthouse times were recorded case by case in a study setting, with answers captured in a worksheet. Accuracy was reviewed on seven of the 40 cases. Results at another site will depend on its registries, its case mix, its documentation, and how its team adopts the workflow.

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