

The success of an Ambulatory Surgery Center (ASC) is often dependent on the efficiency and rapid turnaround of surgical cases. This will become increasingly important as surgical caseloads continue to grow - with the number of outpatient surgical procedures in the US expected to grow by a compound annual rate of 2.1% between 2019 and 2026, to ~144 million procedures.¹ Keeping up with this growth will be challenging for ASCs that rely on paper-based charting processes, which industry estimates show may be anywhere from 50% - 80% of ASCs.²³³

Without an electronic charting solution, the time that front office, back office, and clinicians spend on manual charting efforts may limit an ASC's ability to take on additional cases, limiting revenue, or require additional staffing to do so, increasing costs. Expenses for items such as paper, chart folders, labels, storage, retrieval, and shredding, will also increase as surgical volume grows. Quality of care may be impacted as well, as paper charts can limit the ability to collaborate and see important patient information, such as an updated allergy or patient limitation, all in one place.

Hobson & Company, a research firm focused on Return on Investment (ROI) studies, worked with HST Pathways to explore these challenges. They conducted in-depth interviews with nine HST Pathways customers, testing and confirming the sources of value generated by the HST eChart solution and collecting data points to quantify its impact post-implementation. Customers found that the HST Pathways solution addressed their challenges and delivered measurable results and a strong return on investment. The goal of this white paper is to highlight examples of operational and business benefits that can be realized with a comprehensive electronic charting solution.

Over 3 years, customers can experience a

200-400%
ROI

Based on this analysis, a sample ASC with: 100 cases/week; spending 20 minutes per case on chart prep and 10 minutes by clinicians on charting; and monthly costs of \$1,600 for paper, folders, labels, and other charting costs, would see positive cash flows from using HST eChart in 3.8 months, and generate an ROI of 301% and a total value of \$534K in three years.

^{3.} https://www.ascfocus.org/ascfocus/content/articles-content/articles/2021/digital-debut/asca-survey-shows-mixed-usage-of-ehr-among-ascs



^{1.} https://www.verifiedmarketresearch.com/product/us-outpatient-surgical-procedure-market/

^{2.} https://www.beckersasc.com/benchmarking/4-statistics-on-ehr-use-location-more-in-ascs.html

Medical Charting Challenges

Decreasing the time spent on charting

The time required to manage patient charts, including chart preparation, printing the required forms and stickers, updating patient information, and closing/completing and filing the charts, can be significant when the process is paper-based. Customers interviewed reported needing at least 30 minutes on chart prep per paper chart, which in some cases added up to a full-time job for one person. Clinician time spent entering data into patient charts can also be extensive, and can result in multiple people (nurses, doctors, anesthesiologists) writing the same thing on multiple sheets of paper, that is then re-copied into the patient chart. Some customers noted that this often used to result in a number of hours of overtime at the end of each day, just to catch up on charting.

Reducing surgery center costs

The costs of paper charting can be significant when all supplies (paper, ink/toner, folders, stickers), processes (scanning, shredding - by a company certified to shred confidential documents), and chart storage fees, are factored in. Customers reported significant savings in paper alone, noting that they would have needed an average of 35-40 pages per chart when their charting processes were still paper-based. The cost of surgical supplies can also be a large line item for ASCs, but managing these costs can be more difficult when supply usage and inventory depletion tracking are managed manually. The time required can be extensive, and the chance for errors and omissions can increase.

Improving compliance and patient safety

Every completed case needs to be audited to ensure it is compliant and signed, but when charting is done manually the time required can be significant. Customers reported that chart audits could in some cases be a full-time job for one staff member. Compliance with CMS reporting requirements is also more difficult with paper charts. The effort required to compile all of the required quality indicator reports can be extensive. Beyond regulatory compliance, the use of paper charting can increase the risk of patient safety issues as well. Key information such as drug interactions/allergies, or changes to treatments or procedures, may be written down by one clinician but not seen by another care team member. One customer noted that now having all patient information in one place, post-HST eChart, is key to avoiding near misses.

Customer research identified benefits of the HST eChart solution in two key areas:

Increased Efficiencies
Strengthened Business Performance



Increase Efficiencies

Reduce front office time on chart prep and chart closing/completion

HST eChart is tailored for ASCs, providing flexibility to define charts and workflows down to the physician and procedure level. It is highly configurable and provides easy, real-time access to data, and is designed to work with HST preference cards to pull in data including supplies and medications to pre-populate the chart, saving "clicks" and searching.

"We went from needing at least 30 minutes per chart for chart prep down to an average of 5 minutes per chart, an 85% time savings."

- Director of Nursing

Customers interviewed reported:

50%

REDUCTION in time spent on chart prep, and a 30% reduction in time spent on chart close-out

Customers interviewed reported:

60%

REDUCTION in clinician time spent on charting

Improve clinician charting efficiency

HST eChart's BLOC™ technology allows cases to be charted much more quickly and provides the ability to tailor charts to various procedure and physician requirements. QuickChart™ also allows for easy entry of non-patient specific information about the case, and integrations with vital sign machines allow this information to be pulled directly into the chart as well.

"We have been able to reduce the clinician time spent on charting, per procedure, by an average of 60% with HST eChart."

- Practice Administrator

Reduce time spent recording supplies used / inventory depletion

HST eChart streamlines the supply usage data for accurate case costing and materials management tracking. It's designed to work with HST preference cards to pull in data, including supplies, to pre-populate the chart. Real-time capture of supply usage throughout the ASC reduces the duplication of effort; of first having to write supplies used on paper and then entering the information into the system.

"Tracking supply usage is 50% more efficient, as we no longer have to go into a different system to record this, everything is now right in HST eChart."

- Charge Nurse

Customers interviewed reported:

50%

REDUCTION in time spent recording supplies used / inventory depletion

Reduce medical records staff time spent on chart audits

HST eChart has built-in indicators that help ensure regulatory compliance for timely chart completion and allow for easy identification of incomplete charts, so current status of a patient's chart is always known. In addition, automated tasks allow staff to receive alerts for review of lab results, required operative reports, and more.

"We saw a 50-75% reduction in time needed to audit cases, and can now audit the day's charts in less than 15 minutes."

- Clinical Director

Customers interviewed reported:

REDUCTION in time spent on chart audits

Customers interviewed reported:

80%

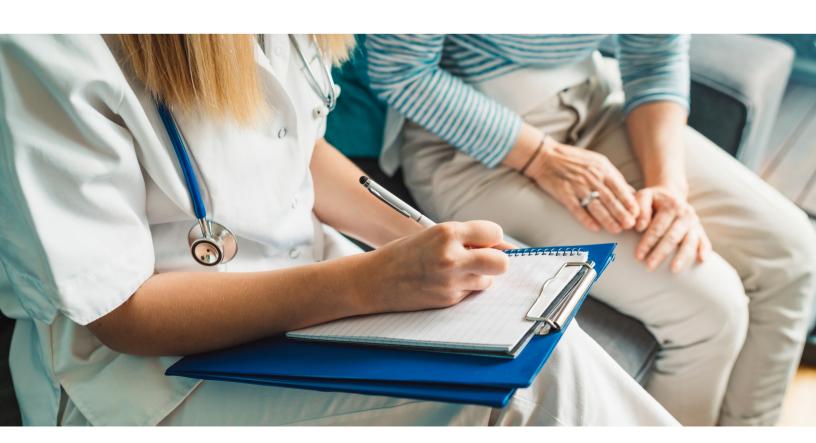
REDUCTION in time spent on CMS report submissions

Reduce time spent on CMS reporting / report submissions

HST eChart provides the technology to aggregate and report results to receive reimbursement, as electronic charting makes it easier to retrieve/track the data required, with all case data immediately available. This allows accurate data and statistics to be compiled in just a few taps, versus needing to complete laborintensive paper chart reviews.

"The annual CMS submission used to take two full weeks of work for multiple staff members, and now it takes just minutes."

- ASC Administrator



Strengthen Business Performance

Eliminate cost of paper charting supplies and storage

HST eChart is an electronic charting solution inspired, designed, and built by clinicians. It's highly configurable, providing easy, real-time access to data, featuring seamless integration with the HST Practice Management solution. It leverages a single database design that spans the care continuum from scheduling to charting, billing, and supply chain management.

"We went from needing an average of 35 paper pages per chart down to 10, and also saved at least \$15/day that used to be spent to retrieve charts from offsite storage."

- Director of Nursing

Customers interviewed reported:

75%

REDUCTION in paper chart supply costs, and in chart storage, shredding, and other costs

Customers interviewed reported:

1 less

REDUCTION in number of patient safety incidents per year

Reduce liability risks with improved patient safety

With HST eChart patient information is shared among clinicians, with immediate drug/drug and drug/allergy checking. Multiple users can chart on a single patient simultaneously and communicate changes made by all users with chart access, allowing clinicians to make immediate procedure or treatment changes based on another clinician's documentation.

"With HST eChart we now get an alert if there are consents or information missing, such as from the surgeon or the anesthesiologist, so the missing signatures are collected before the procedure begins, helping to mitigate risk."

- Charge Nurse



Key Findings



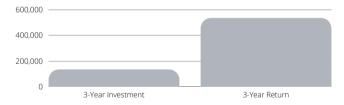
ROI Research Results

The value of a comprehensive electronic charting solution is immediate and demonstrable. Using a sample ASC moving from more manual/paper-based processes, with the following inputs (pre-HST eChart):

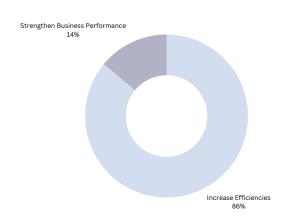
- An average of 100 cases per week
- 20 minutes spent on average on chart preparation, and 30 minutes on chart completion, per chart
- 10 minutes spent by clinicians on charting, per chart
- An average of 5 minutes per case to record supply usage
- 40 hours required per month to complete and submit CMS quality indicator reports
- Average cost of \$1,600/month for paper, folders, labels, and other paper charting costs (e.g. storage, shredding)

A three year investment of \$133K total in the HST eChart solution generates positive cash flows in 3.8 months. The 3-Year total value created and return on investment are strong at \$534K and 301%, respectively.

Investment vs. Return



Percent of Total Value Delivered by Business Objective







About HST Pathways

HST Pathways, a Bain Capital Company, is the leading provider of a suite of products under the "HST One" membership offering, including practice management software, care coordination, revenue cycle optimization, supply chain management, case costing, patient engagement and communication, an electronic health record system, and data analytics. See why more than 1,400 clients are choosing HST Pathways by visiting www.hstpathways.com.

About Hobson & Company

Hobson & Company helps technology vendors and purchasers uncover, quantify and validate the key sources of value driving the adoption of new and emerging technologies. Our focus on robust validation has helped many technology purchasers more objectively evaluate the underlying business case of a new technology, while better understanding which vendors best deliver against the key value drivers. Our well researched, yet easy-to-use ROI and TCO tools have also helped many technology companies better position and justify their unique value proposition. For additional information, please visit www.hobsonco.com.

Disclaimer:

The return-on-investment (ROI) and other financial calculations expressed in this paper are based on data provided by HST Pathways customers and various assumptions and provide estimates only. The actual ROI realized by customers may vary from the estimates provided. HST Pathways offers this tool to assist customers with evaluating their ASC solutions; however, HST Pathways and Hobson & Company (the firm that created the tool) are not responsible for the accuracy of any estimates.

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