Hyland™

Doing more with less:

Calculating the ROI of digital
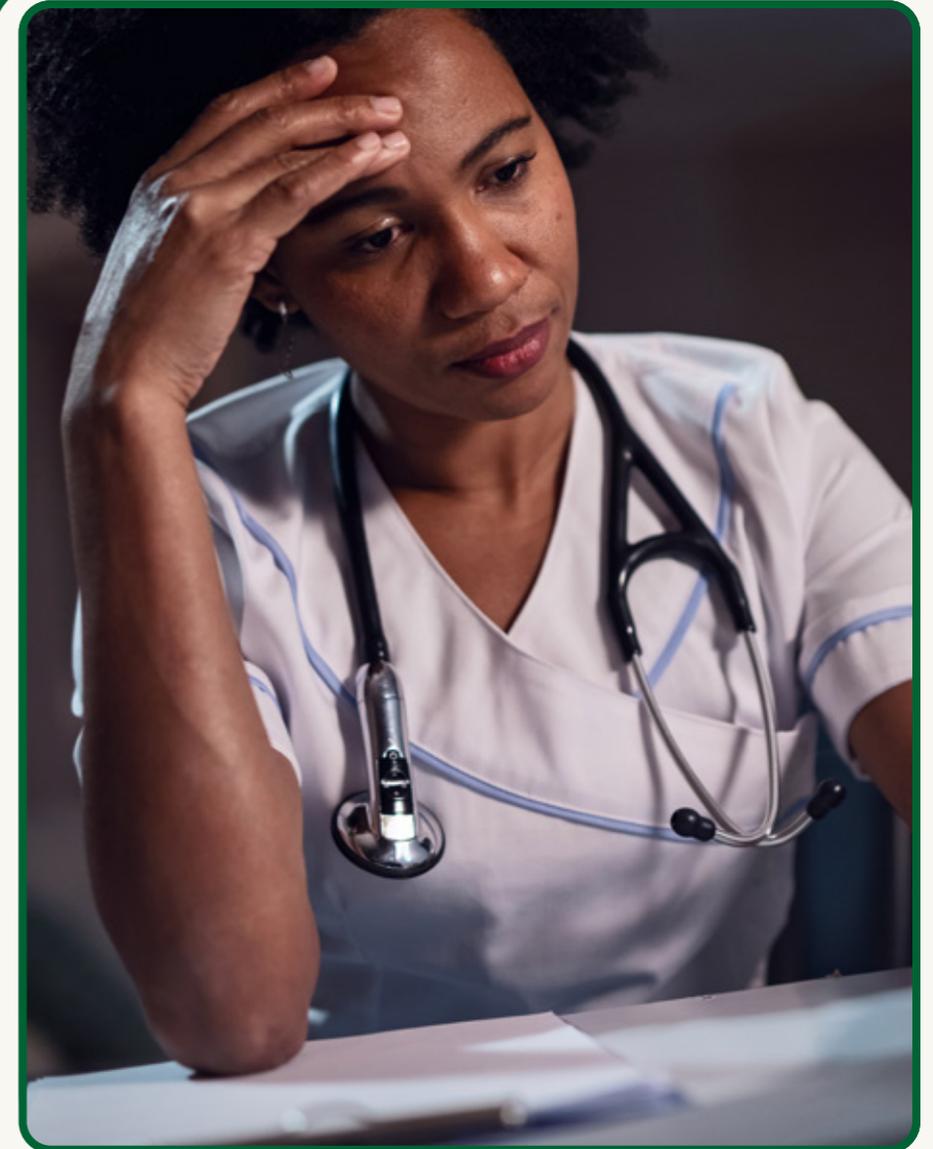Medical Records Classification

Over the last decade or so, the cost pressures facing healthcare providers have increased dramatically. Where once costs were kept relatively private between health system and payers, the push for transparency and the growth in healthcare consumerism has changed.

Today patients and payers expect competitive pricing. To remain competitive, health care systems must lower costs to meet demands. For most organizations, achieving this goal means doing more with less.[i]

This push for efficiency has upended many traditional healthcare financial strategies. Organizations must focus on its entire financial puzzle, understand how the pieces best fit together and protect it all from external forces, like competition, and unforeseen circumstances, such as a worldwide pandemic.

The COVID-19 pandemic rewrote the book on doing more with less for hospitals around the world. "It's clear that today's challenging financial environment is here to stay, and hospital leaders must be proactive in seeking out opportunities to refine their operations and remain competitive," said Erik Swanson, Kaufman Hall's SVP of data and analytics."

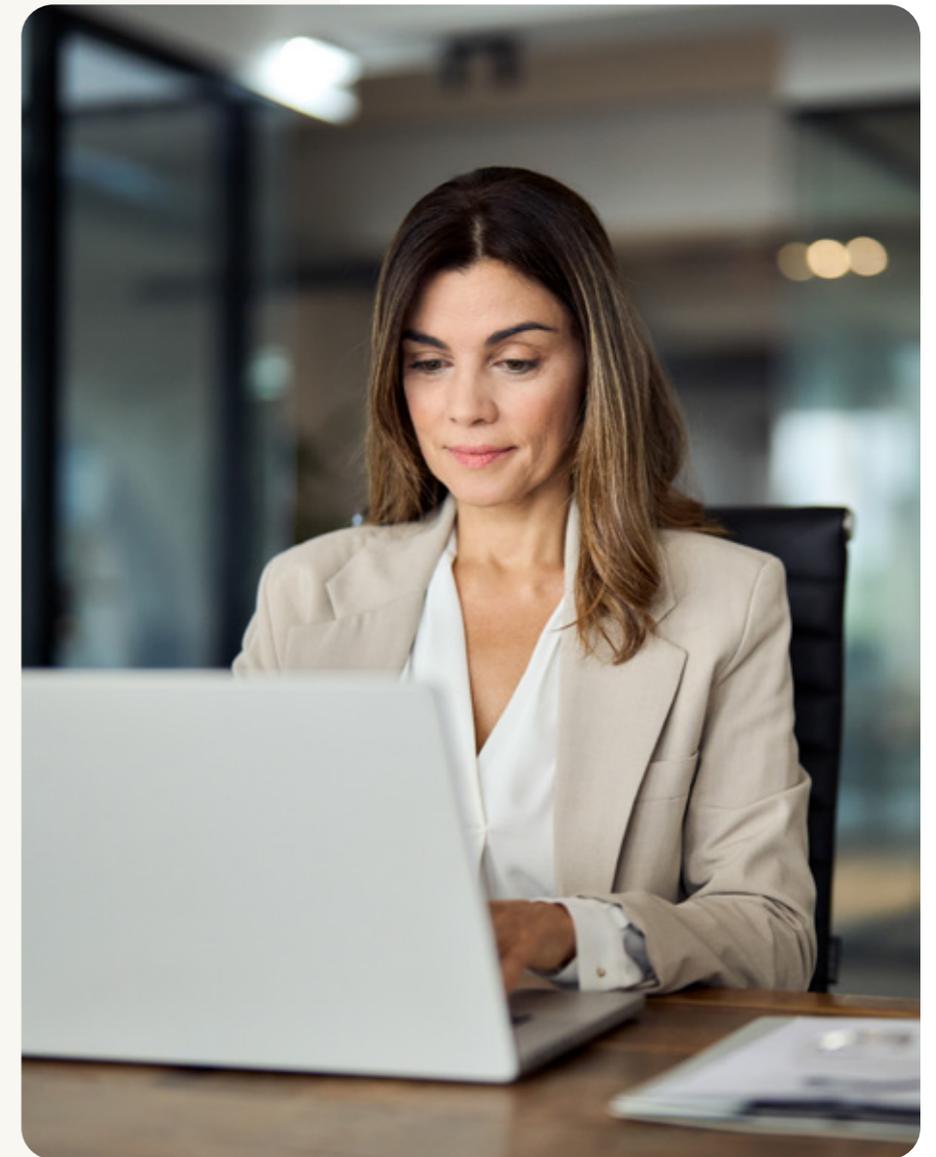# Medical records classification a good place to start

Digital transformation efforts are significant means to do more with less while still meeting demand, and the healthcare industry has already come a long way.

Healthcare organizations have already enlisted EHR technology to further support clinician time savings. Most have leveraged EHR messaging technology to quickly share critical information with clinicians, automate lab orders, create reporting dashboards, expand telemedicine capabilities and more.

But an EHR is only as good as the information in it. And the use of that technology may not extend to every aspect of the facility's clinical operations, let alone the practices of that hospital's care partners and peer providers. That lack of cohesion can thwart efficiency efforts.

It takes a dedicated health information management (HIM) team to change that. But clinical documents — including referral letters, clinical narratives, treatment notes and more — arrive in various forms, such as paper and fax. Add medical images to that list, and one can see how critical it is for the EHR to include that information. It is how hospitals complete the patient picture and achieve the efficiency results described above.

Getting there can be a challenge. Typically, HIM professionals sift through this information, scanning it and manually classifying and indexing these documents. This process is often time consuming and subject to human error, resulting in a significant impact on productivity, patient care and the comprehensiveness of the digital record. Furthermore, it takes significant manpower — a resource that can be cost prohibitive in today's environment. With budgets tightening and competition growing, making this front line team as efficient and productive as possible is paramount.

The promise of automated medical records classification

To increase productivity and ensure better patient care, many hospitals consider investing in intelligent document classification solutions. These solutions help automate many of the manual steps that can bog down the digitization process.

The right intelligent classification technology can identify medical documents in as little as five seconds — 35 seconds faster than the average time it takes a human to identify the same material. This accelerated workflow saves time and money while improving accuracy and consistency.

Intelligent document classification:

1 Automates key steps in the process, from scanning and delivering the image via a workflow to exporting extracted data to the appropriate clinical or business system

4 Removes the time-consuming steps of indexing the document type and the required patient and visit information keywords

2 Extracts much of the data needed to process any medical document

5 Eliminates entry points for human error while cutting labor costs associated with manual processing

3 Drastically reduces the need for exception handling and error correction

6 Creates consistent standards and rules to govern medical document types

For users, the solution is an efficiency boon. However, decision makers who hold purse string may be understandably hesitant to make any type of technology investment now. Luckily, proving the payback and long-term value of this type of a medical records classification solution is a relatively straightforward proposition.

Value assessment benefit

Financial
- Return on investment
- Net benefits
- Payback timeframe
- Net present value
- FTE benefits

Intangible
- Alignment with organization's strategic objectives
- Non-quantifiable benefits, like clinician and patient satisfaction

Value assessments prove medical records classification worth

A value assessment can provide the hard data necessary to alleviate stakeholder concerns, demonstrate the estimated solution value and keep the project moving forward. They can also help show the organization how the solution improves operational efficiency and bolsters clinician and patient satisfaction.

At a high level, a value assessment is a collaborative process between solution provider and healthcare organization. Over the course of a month, healthcare and solution provider team members work together to parse out the overall impact of the solution on the process, in this case document indexing.

The assessment's goal is to uncover the project's potential value, both financially and intangibly, and then deliver the results to key stakeholders and executives, with the expectation that those stakeholders will then confidently move forward with the project. It helps prove the value of the project or proposal and provides the data necessary to gain budget approval and prioritization.

Case study: Assessment projects 87 percent ROI for well-known teaching hospital

The HIM director of a well-known teaching hospital in the Central United States and (his) team were tasked with figuring out how to increase overall operational efficiency and enable its medical document classification team to do more with less. The hospital engaged with Hyland Healthcare to conduct a value assessment to see how an automated document indexing and classification solution might help it achieve this goal.

The hospital's standard process was similar to many of its peers: manually identifying, classifying and indexing clinical content — referral letters, clinical narratives, treatment notes and more. That manual process included separation of documentation, then classification to one of several document types. A quality assurance analyst would then review batches of scanned and classified data, reassigning document types, dates of service and other information as needed when discovered.

This process can be laborious and time consuming. On average, it would take a skilled HIM professional nearly two minutes to identify, classify and index each piece of clinical content. Annual time spent on the process, from an FTE point-of-view, was over 37,000 hours.

Through the value assessment, the combined team determined that implementation of Hyland's intelligent capture and classification solution would reduce time spent on the process by 78 percent annually — which would equate to an FTE time-savings equivalent of more than 29,000 hours.

More than that, through both time saved, reduction in errors and other intangibles, the assessment projects a **five-year ROI of 87 percent**, with the solution **paying for itself in 20 months.**

Classification and date of service process hours — before and after Hyland enhancements

Hours before intelligent capture and classification implementation	Hours after intelligent capture and classification implementation
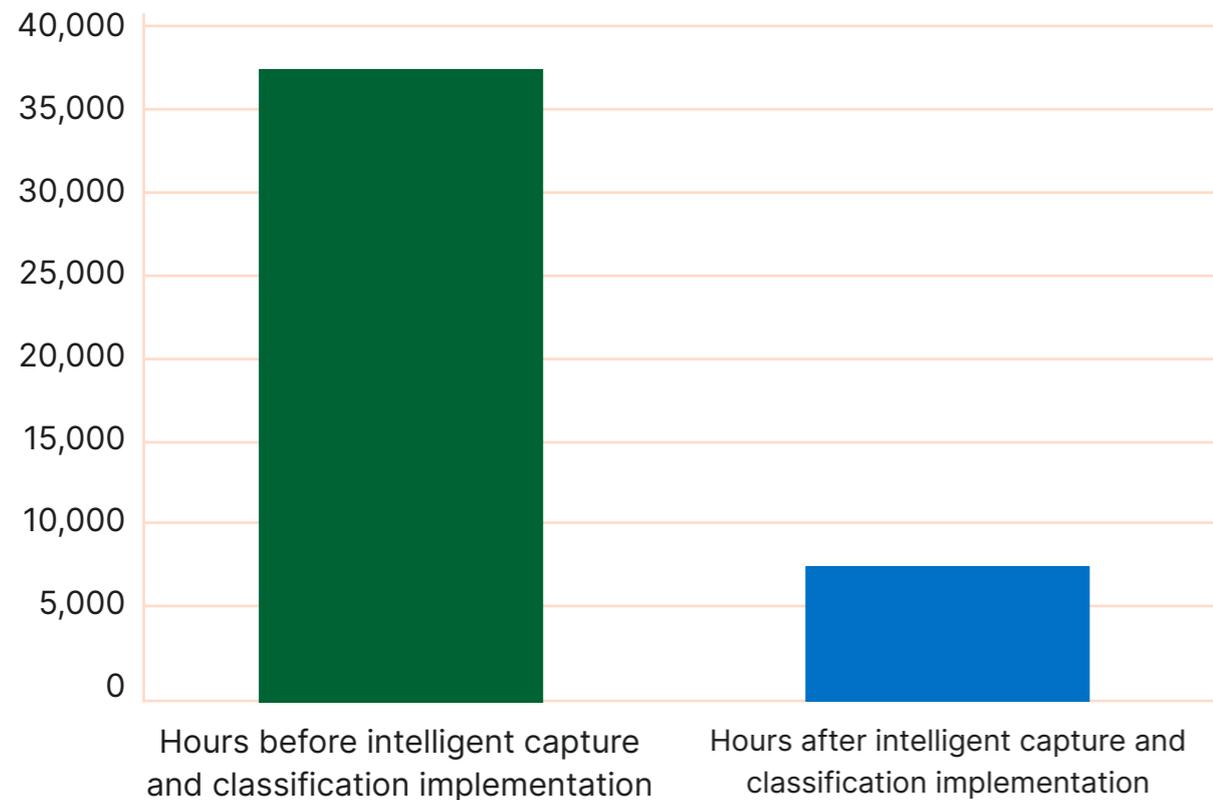
Savings summary:

- 5-year ROI: 87 percent
- FTE additional time available equivalent: 15 FTEs
- Pays for itself: 20 months

Show your work

A glimpse at how we conduct ROI evaluations

While data remains proprietary for our customers, we thought it might be helpful to provide some insight into how we determine possible medical records indexing ROI for any healthcare customer or prospect.

We begin with the number of external medical records a hospital receives for scanning and indexing in an average month. After determining the number of work hours technicians spend indexing records in a given month, we then compare that against the average time it takes Hyland's automated medical indexing solution to complete the same task. We can then compare the overall cost for each example, based on financial information supplied by the customer or prospect, to come up with an estimated annual savings.

There are, of course, other variables unique to each situation, which can affect both cost savings and ROI for individual healthcare systems.

Even still, it's easy to see how this simple equation can open up a window of opportunity.

Want to learn more? Contact Hyland Healthcare for a free ROI assessment.

Case study: Assessment projects mid-sized hospital's HIM team can easily take on more work

Similar to the larger teaching hospital, this mid-sized East Coast hospital was struggling through manual classification and indexing, both with internal and external clinical documentation. Once captured, HIM staff would review scanned clinical content and make any necessary adjustments. But the team was inundated with content, work was falling behind, and content volumes were expected to increase due to projected near-term acquisitions.

The hospital engaged with Hyland to conduct a value assessment. The HIM leadership team wanted to know if an intelligent capture and classification solution would allow its team, as it was presently staffed, to successfully take on that added workload.

After a detailed, collaborative review of the hospital's processes, the assessment projected a **time savings of more than 60 percent**, which meant the team could confidently take on that new work. The assessment also projected a five-year ROI of 25 percent, with the solution paying for itself in about 19 months.

Savings summary:

- 5-year ROI: 25.1 percent
- FTE additional time available equivalent: 6 FTEs
- Pays for itself: 19 months

Case study: Assessment demonstrates cost reduction versus current vendor solution

A West Coast hospital felt their existing vendor was nickel and diming their organization for medical record classification. A review of their costs and hours spent with the existing vendor revealed an opportunity for cost reduction and time savings. Their organization can achieve a 62.5% five year ROI by switching to Hyland. Their investment in Hyland SaaS technology will pay for itself in 13 months. They can also reduce their annual FTE hours for medical records classification by 13 percent.

Intangible benefit: Clinical satisfaction

While most healthcare organizations undergo a value assessment to discover the project value of a solution implementation or enhancement or improve overall operational efficiency, many are surprised to find an unexpected benefit: greater clinician satisfaction.

How? Consider that many hospital systems have only one or two classifications for external information. Whether it is a lab result or an imaging report, that information is classified the same. This means clinicians must wade through multiple documents to find pertinent information. It is a time-consuming frustration for many.

The ability to expand the number of identified document types for incoming clinical content — to classify varied consult notes by type rather than group all of that information under the same umbrella — makes accessing and reviewing information by the clinician in the EHR that much easier.

In other words, beyond time and cost savings, the solution can help shorten patient length of stay, reduce labor costs and improve patient information visibility. That improves clinical decisions and patient outcomes.

Conclusion

For many years now, in an effort to remain competitive and create transparency healthcare systems have struggled to find ways to streamline operations while maintaining excellent patient care. The unprecedented challenge of COVID-19 has only underscored the need to do so. Digital transformation efforts have helped, but gaps still exist, such as unstructured data not included in the EHR or manually classified medical records that take clinicians time and effort to uncover.

Automating these processes not only creates new found efficiencies and pays for itself in less than 24 months, but also enhances patient care by providing physicians with an easier and faster way to access information in a more complete patient record.

Want to learn more? Visit **Hyland.com/HIM**.
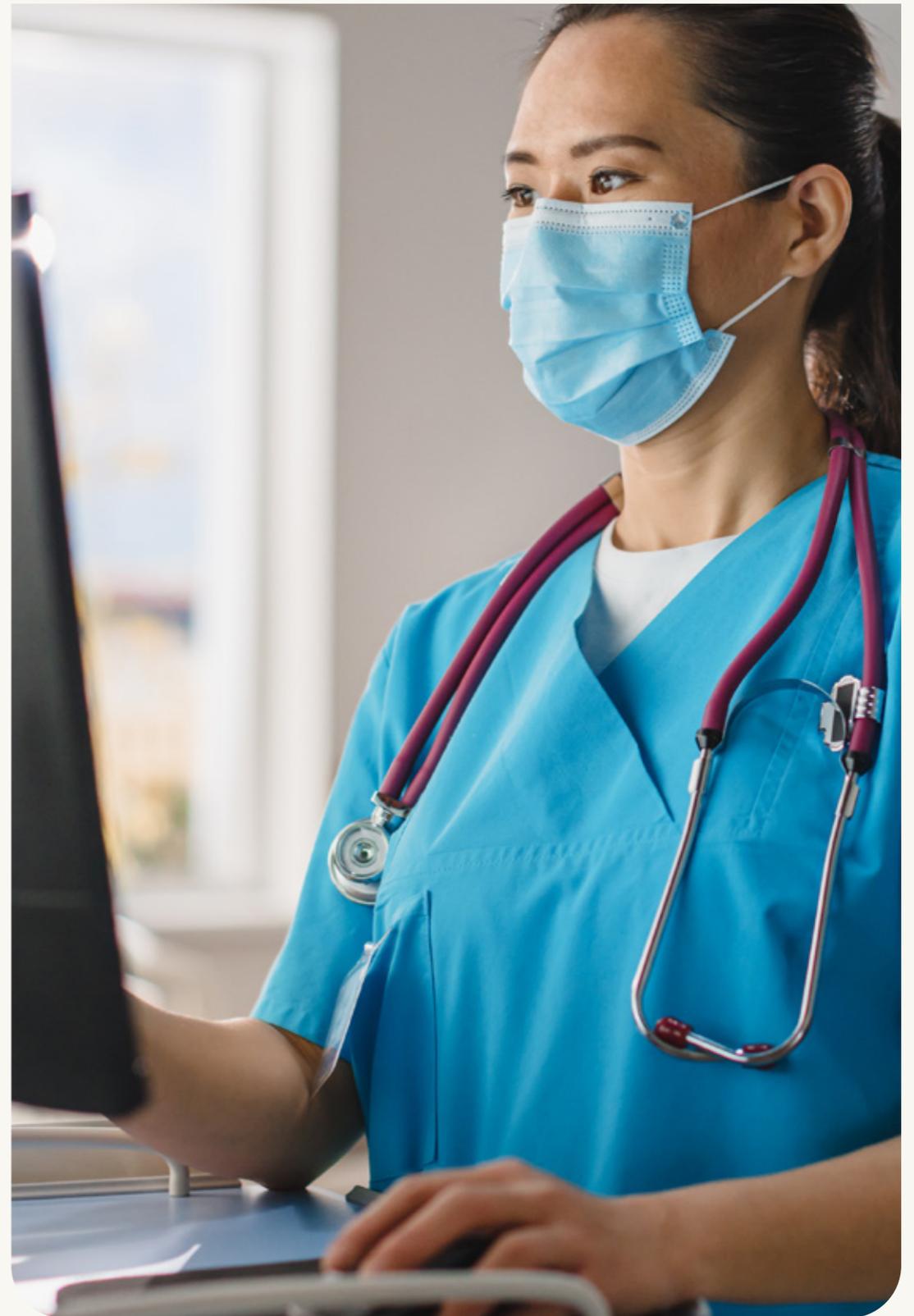
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Sources

i.   For hospitals and health systems: Strategies for doing more with less (March 2014) The Health Care Blog

ii.   AHA: Half of U.S. hospitals could be operating in the red by end of the year (July 2020) King, Robert

iii.   U.S. hospitals are losing millions of dollars per day in the midst of the COVID-19 pandemic – and recovery may take years (May 2020) Farr, Christina