# THE HARD FACTS



# EPIC: GREAT OR EVIL?

Everybody in healthcare IT has a strong opinion about Epic. Most of the people who express those opinions confidently (and sometimes loudly) don't have any first-hand experience with the company or its products. It's like asking an armchair quarterback dribbling wing sauce onto his shirt how Peyton Manning should be reading the defense.

On the "Epic is great" side are loyal customers who are financially vested in Epic's success; consultants who make a great living riding on Epic's coattails; and research firms who sell reports after talking to a few Epic-using hospital employees of unstated job titles.

The "Epic is evil" contingent has a significant portion of people whose employer is losing business to Epic; experienced industry specialists who Epic won't hire since they aren't new graduates; and those naysayers who just don't like Epic's success.

Also in the anti-Epic camp are critics of electronic health records who use Epic as an example of how technology has ruined medicine. Clinicians might understandably push back against software that requires them to manually enter information for someone else's benefit.

If you really want to understand Epic, you have to bypass the pontificating, self-proclaimed experts and instead ask Epic's customers, those people who bought and are using its products on the front lines.

I decided to reach out to executives in a variety of leadership roles – not just CIOs -- at hospitals that make up a significant chunk of Epic's customer base.

That's harder than it sounds. You need a way to identify and contact those people. The folks at <a href="peer60">peer60</a> offered their RaaS (Research as a Service) platform to help me quickly gather a lot of Epic customer executive feedback. It worked really well.

I don't have a horse in the Epic race. The company and its chief competitors don't sponsor HIStalk and I get no special favors from any of them. Unlike most research reports, I'm doing this one as a free service – there's no charge to read it, no opportunity to advertise in it, nothing else to buy, and no behind-the-scenes selling of the data to vendors looking for competitive insights. Not a single dollar changed hands.

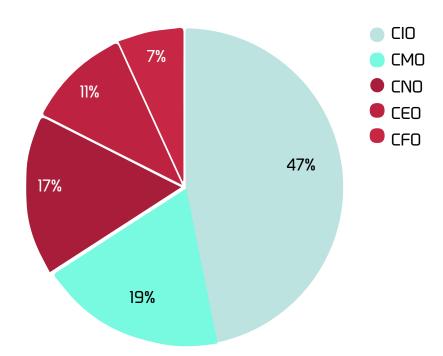
#### **Demographics**

I received responses from:

- •22 chief executive officers
- •13 chief financial officers
- •96 chief information officers
  - •39 chief medical officers
  - •32 chief nursing officers

It's no surprise that CIOs were the survey group most willing to share their opinions about Epic. They are more likely to be familiar with HIStalk and thus more likely to respond. A lot of what we all hear about Epic comes from those CIOs since they speak at HIMSS, write articles, and do interviews.

I obviously wanted to pick the brains of those CIOs, but I was also interested to find out what the CFO thinks, or the chief nursing officer, or the hospital CEO. They don't have quite the career investment in Epic that the CIO has. They also have a less IT-centric view of how Epic affects their operations.



"I've been working in healthcare IT since 1984 starting as a system installer, moving into healthcare IT consulting and then into roles as CIO and Epic and their software is by far the best that I have ever worked with." – CIO

"Epic has great potential, but the cost, time, and effort for implementation is extremely challenging." – VP of medical affairs

### Customers are on the fence over their willingness to publicly report any Epic-caused patient safety issues, but ask a CIO and they'll tell you honestly

You hear a lot about so-called "gag clauses" -- the mythical, Loch Ness Monster-like beast that many people claim to have seen without providing proof – that contractually muzzle a vendor's customer from disparaging the product or warning others about software-related clinical problems. Not just going on the local TV news station, but even calling up a peer at another Epic site to provide a heads-up.

We wanted to know how our executive respondents would feel about publicly speaking or writing about Epic-related problems they might observe.

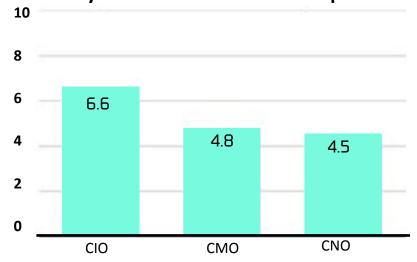
Nearly three-fourths percent of CIO respondents said they would be comfortable to some degree in going public with their concerns, with more than half placing themselves in the "very comfortable" zone.

Chief medical officers and (especially) chief nursing officers are a lot less comfortable talking about problems they perceive as being Epic related.

Several factors might have impacted their answers, such as organization's policies or an internal belief that IT issues fall more into the CIO's domain. However, no respondents specifically mentioned being prohibited or even discouraged from speaking up.

The positive aspect of this result is that CIOs of Epic-using organizations aren't afraid to speak honestly about software-caused patient care issues. You might have to ask them directly, but you can expect truthful answer.

# How comfortable would you feel publicly speaking or writing about any patient safety "I would not be that comfortable issues you encounter because of Epic? [speaking publicly about patient



"I would not be that comfortable [speaking publicly about patient safety issues] regardless of the vendor system used. We have public relations processes to follow." - CIO

"Epic is not a quality system. It needs a vigorous overhaul for safety assurance." - CMO

"Most cases where patient harm occurs and the EMR is blamed are related to flawed or outdated clinical practices and/or human error." - CIO

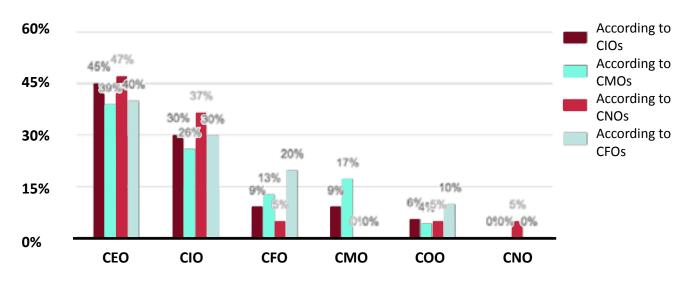
#### CEOs and CIOs are most responsible for steering the ship to Epic

CEOs and CIOs are the #1 and #2 (respectively) influencers in swaying their colleagues -- and selection committees -- to Epic. As a result, they are most often positioned to take the praise or blame for the overall outcome.

The intention of the question was to name the single individual who was most influential in the Epic selection, but several respondents added comments that the selection committee had the final say. That was a given – what I hoped to learn was whose executive hand visibly or invisibly steered the Epic choice the most.

Perhaps the only other interesting finding from this question is that nearly nobody – including the CFO respondents – suggested that the CFO was most influential in the product decision. That might seem obvious, but the CFO's involvement in selection and system oversight is often far greater in the small hospitals that are more likely to use Meditech or CPSI than Epic.

#### Who was most influential in deciding to buy Epic?



"Epic is by far the best vendor I have ever worked with. They are very up-front with their customers and embrace their issues." - CEO

#### What is the big operational picture of using Epic?

The CEO is best equipped to rate how Epic impacts overall operations. We asked them to rate the degree to which Epic provides their organization with a true competitive advantage.

The mean score was safely (but not deeply) in positive territory. However, this does not tell the whole story. There is enough separation between the mean and median scores compared to other graphs that an explanation is worth noting. A wider margin between the mean and median show that CEOs who favor Epic are more passionate in their support than their peers who are not as impressed.

Overall, more than half of the CEO respondents strongly agreed that Epic provides competitive advantage, while only 25 percent strongly disagreed.

#### CEOs: Epic provides your organization a true competitive advantage.



"It is an expensive product but has been worth the investment. I would make the investment again and frequently encourage other CEOs who are considering EHR options to strongly consider Epic." - CEO

"Epic EHR adversely affected our integrated cardiovascular physicians (40+ MDs) by making their ambulatory clinical workflow much worse as compared to their previous EHR (NextGen). Epic has increased our operating cost at a time when we had no ability to absorb that cost. The Epic EHR, at least until now, has not added a strategic advantage or underlying improved operations." - CEO

"Productivity in the physician practice dropped and after three years and still is not where it was pre-Epic. Physicians are frustrated with the amount of data they input and the lack of what that contributes to the visit or completeness of information later."-CEO

#### **CIO longevity pre- and post-Epic**

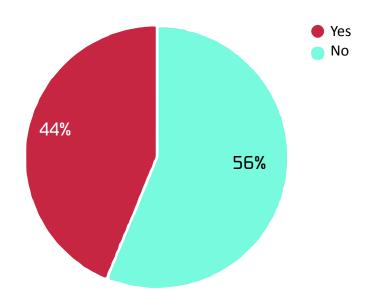
It's not uncommon for a CIO to leave after Epic is chosen but before it goes live. It's not entirely untrue that it's Epic's way or the highway, so when a hospital CEO hears that their expensive implementation is being jeopardized by the CIO or anyone else, job turnover is likely.

I asked CIOs if they were serving in their current role when Epic was chosen. Fifty-six percent of them said yes. Epic's big customer growth spurt happened over the past five years or so, which seems like a lot of recent CIO turnover even compared to the high healthcare average, where CIO often really does stand for "career is over."

Deeper digging might have yielded interesting information. How long ago was the selection made and when did go-live occur? Did the previous CIO get fired, retire, or change jobs voluntarily? Do CIOs involved with an Epic selection have shorter tenures than CIOs in general? That's another study for another day.

CIOs who came on board after the selection of Epic might feel differently about the product since they didn't help choose it, but I didn't see strong evidence of that. The "replacement" CIOs are a little bit less enthusiastic about Epic, but not with a high degree of statistical significance.

### CIOs: Were you in your current role when Epic was originally selected?

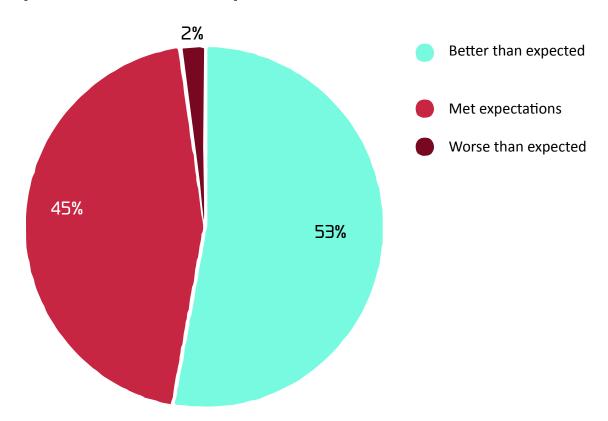


"I have been a healthcare IT leader for almost 30 years. Over that time, I have installed, supported, maintained, and displaced almost every vendor system currently or formerly available. Though there are no 'perfect' systems, at least In my experience, Epic has been and continues to be an exceptional partner." - CIO

#### What happens once the honeymoon is over?

It was about a 50-50 split among CIO respondents as to whether Epic was a "better than expected" or "same as expected" vendor in the preceding 6-12 months. Only two percent said Epic had disappointed them.

# CIOs: How has Epic lived up to your expectation over the past 6-12 months?



"More than any other vendor I have used in my 30+ year career Epic has been honest with me. I may disagree with them, one of their people may be wrong, but I have not had the type of intentional misrepresentation that I get out of so many others." -CIO

"Productivity in the physician practice dropped and after three years still is not where it was pre-Epic. Physicians are frustrated with the amount of data they input and the lack of what that contributes to the visit or completeness of information later. The positive is the ability to see what has been done for the patient at other Epic sites. The negative is that if the patient was in a non-Epic facility, we cannot see them." - Administrator

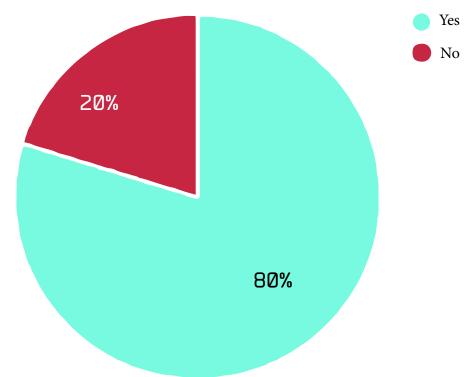
#### CIOs hope their next job is with another Epic customer

A full 80 percent of CIO respondents said they would prefer that their next employer be an Epic customer.

That could mean a number of things: that they would prefer to use their Epic expertise going forward, that Epic-using employers have other attractive employment attributes, that Epic-using health systems have fewer integration issues, or that they find Epic easier to deal with than its competitors.

Regardless of the reasons behind the responses, health systems that sign up for Epic often recruit CIOs from Epic-using facilities, just as CIOs from an Epic-using site often end up moving to another Epic site.

# CIOs: Would you prefer an Epic-using organization if looking for a new job?



"I think [Epic's] heart is in the right place. The challenges under hot debate are easy to talk about, easy to legislate, easy to comment on, easy to mandate but technically and operationally, VERY difficult to accomplish..." - CIO

#### Does the money Epic consumes make sense to CFOs?

More than half of responding CFOs say Epic's full project cost was about what their organization had budgeted. A lucky one-fourth say their Epic project came in under budget, while about 15 percent said they spent a lot more than they planned.

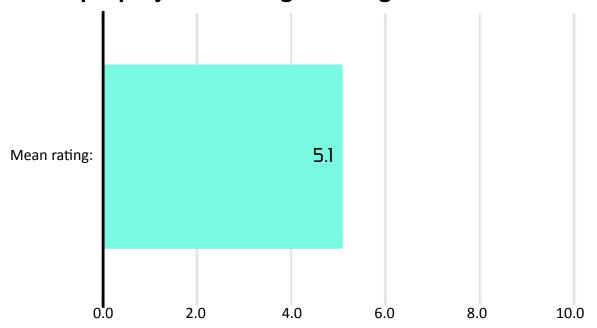
These responses reflect two characteristics of Epic. Their systems aren't cheap, but the company forces hospitals to fully budget all implementation costs, including the internal ones. Most of the time it's a big but at least predictable number.

The big checks aren't all written to Epic. Third-party consultants, hardware, and internal project staffing costs can run over budget. Scope creep is often the reason for having to go back to the well for more money. A blown project budget could be the result of either poor project planning or poor project execution.

Of all data points, this was by far the lowest rating Epic receive from its customers. It's tough to swallow hard before signing a big project budget, but even worse to have to ask for more money to finish the job.

This would be an interesting follow-up study for users of all systems – how worried are CFOs about the ongoing cost of a system whose high license fee figure is used to calculate annual maintenance fees that increase each year?

# CFOs: Including all costs, how close was the Epic project to being on-budget?



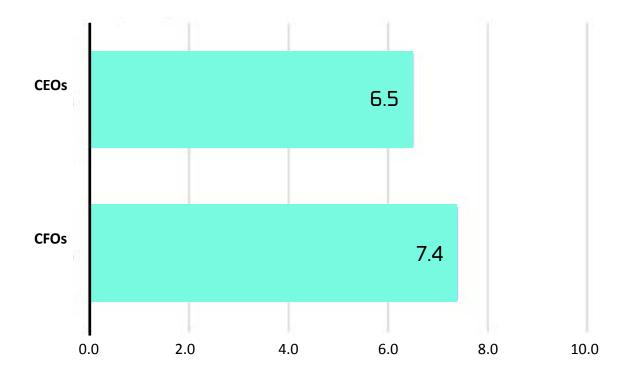
"Our hospital uses Allscripts [and] Epic did a horrible thing by charging us to exchange data with them while making it free to communicate with our competitors who happen to run Epic." - CIO

#### **Even CFOs say Epic is worth the cost**

CEOs say Epic's benefits moderately outweigh its original and ongoing costs. And while CFOs might express concern about budget overruns with their Epic projects, even they believe that Epic's tangible benefits outweigh its costs (7.4 out of 10). Epic appears to eventually appease even skeptical CFOs that they're getting their money's worth.

I didn't ask specifically about which benefits Epic-using hospitals are seeing since it was already a long survey. Benefits are in the eye of the beholder.

# Epic has provided tangible benefits, financial or otherwise, to make it worth its original and ongoing cost.



#### Clinical leaders aren't as convinced that Epic is delivering clinical benefit

Hospitals say they're buying Epic to improve care, just as you would expect them to say. Does that actually happen?

Epic isn't impressing the chief medical officers and chief nursing officers. We asked them if clinical care has measurably improved because of their Epic implementation.

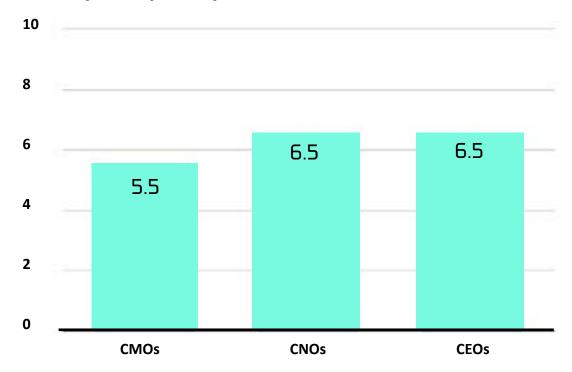
The responses were scattered widely. The average CMO score was 5.5 on a 10-point scale. Only around 20 percent responded with an eight or above indicating "significant improvement."

CNOs averaged a more generous 6.5 score, with 40 percent answering eight or above in the clear "significant improvement" range.

Nearly half of responding CEOs scored Epic's impact on care improvement at eight or above.

Perhaps the question set the bar too high. A positive answer required both measurable clinical care improvement (which is hard enough to deliver on its own) but it also required the respondent to credit Epic with the improvement. That's asking a lot of any computer system.

# Clinical care has measurably improved because of your Epic implementation.



#### The vast majority would buy Epic again

Perhaps the most telling response is obvious: knowing what you know now, would you buy Epic again? The answer was a definitive "yes," as offered by 98 percent of CIOs, 100 percent of CFOs, 84 percent of CMOs, and 88 percent of CNOs.

One might interpret the lower clinician executive scores as being reflective of a tough implementation rather than Epic specifically due to the "grass is greener" phenomenon. Or perhaps clinicians perceive that Epic provides limited benefit to them personally while non-clinical executives are more privy to overall organizational benefit that includes everything from financials to inpatient-ambulatory integration. Of course it could be that those clinical folks have worked with Epic's only significant inpatient competitor – Cerner – and like it better.

Regardless, the only real hint of Epic dissatisfaction – and it was just whiff – comes from clinical executive respondents.

#### Would you choose Epic again?



<sup>&</sup>quot;There is no perfect EHR system out there. As one consultant told us, Epic is the cream of the crap." - CFO

#### If your practice works for -- or with -- our health system, you need to switch to Epic

It's no secret that affiliated physician practices feel pressure (or even receive an ultimatum) to adopt Epic. Four out of five participants in this study confirm this to be the case – their hospitals either encourage or require affiliated practices to switch to Epic.

The reasons behind this answer might range from the "glass half empty" (big health systems are trying to protect market share and lock in referrals by pushing Epic on practices for which it might be far too complicated) to "glass half full" (having everybody on Epic creates one patient record and eliminates interoperability problems).

The signal is clear, however. Once a large health system implements Epic, it is highly likely that many of its affiliated practices will – voluntarily or otherwise – do the same.

# Are affiliated physician practices being encouraged or required to implement Epic?



"Epic is not designed for use by a small hospital. While we hear constantly how wonderful Epic is, and all the features they have, it requires a massive Informatics department to try and manage the system. Data is difficult to retrieve and the flow of the system is pathetic. Trying to do chart audits is extremely cumbersome and would take less time in a paper chart. Some of this is an issue of the system needing to optimize the platform, but some of it is just poor design on the part of Epic, in my opinion." - CNO

"Epic is a very large, complex system, and significantly above what a critical access hospital would need, but being part of a system and able to easily transfer patient data throughout the system provides significant value. The system is very costly and upgrades can be very complex with the differences within the system." - CFO

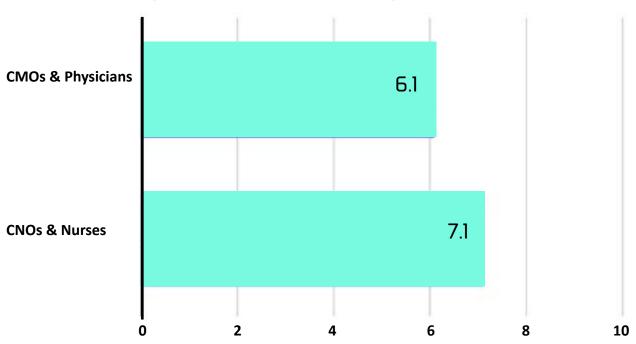
#### Clinicians are less happy with Epic

We asked CMOs and CNOs how satisfied they (and their physicians and nurses, respectively) are with Epic. The average response, on a 10-point scale, was 6.1 and 7.1, respectively.

It might be surprising that CMOs report only modest physician satisfaction with Epic given its reputation as a strong clinical system that provides a longitudinal patient record. Perhaps the CMO's answer does not reflect the opinions of the medical staff as a whole, or maybe doctors just resent documenting in a comprehensive electronic medical record. Or it could be that the medical staff feels administrative pressure to use Epic in a particular way via organizational mandate.

On the other hand, further study might reveal Epic usability problems or a workflow mismatch, especially considering some of the usability-related comments that were provided. That, too would be a study for another day.

#### Caregiver satisfaction using Epic.



"Many workflow items are slower with Epic due to the number of clicks required to get something done." - CMO

"Physicians absolutely hate it because it is not user friendly. Same for most of nursing. We have learned to adjust." - CNO

"Physicians hate the system, and it is very cumbersome to make changes to improve care. Reporting is next to impossible sometimes for basic things such as turnaround times, etc." - CEO

#### Epic and interoperability – it depends who you ask

Many people express opinions about the degree to which Epic is interoperable with other systems. It's a polarizing issue, as competing vendors claim that Epic is a "closed garden" while complaints are rarely heard from Epic-using health systems.

I asked how well Epic exchanges information with non-Epic systems both inside and outside the organization.

CIOs scored Epic pretty well at 7.0 on a 10-point scale that topped out at "seamless." CMOs, in sharp contrast, gave Epic a 4.4, with a fairly even distribution that involved quite a few "incredibly difficult" responses.

I would speculate that CMOs blame Epic for any deficiencies in information exchange they see on the clinical front lines. Epic may or may not be the problem when hospitals can't (or won't) exchange information.

It seems that CIOs have their work cut out for them in trying to evangelize their high regard for Epic's technical interoperability capabilities with their clinical executive peers who aren't seeing great results. Both the CIO and Epic may be taking a black eye for data exchange problems that aren't entirely their fault.

## Does Epic play nice with non-Epic systems both inside and outside your organization?



"Much is read about Epic's difficulty with interoperability. However, name one other platform more able to exchange patient data than Epic." - CIO

"It's the Epic way or the highway. They manage you, not the other way around." - CIO

"It is unfortunate that Epic, once installed, seems to become a sovereign entity in and of itself." - CFO

#### Conclusion

The cacophony of criticism about Epic mostly quiets down when you talk to executives at health systems that actually use it. The key takeaway of this project is that the "would you buy Epic again" number is very high and few health systems have de-installed it. It's not whether Epic is perfect, but rather whether the customer would be better off using a different system.

Physician and nurse executives aren't quite as thrilled with Epic as CIOs and CEOs. But they're dealing with a constituency that is more directly affected by implementation and management decisions that aren't necessarily reflective of Epic in particular even though clinicians might question Epic's usability or its intrusion on their workday.

It's also true that health systems are forcing Epic on their affiliated practices. Those doctors won't necessarily be happy about changing EHRs at someone else's behest.

Epic excels at setting expectations. CFOs reported that their projects, for the most part, cost what they had planned, although that number was Epic's lowest-scoring question in the survey. Only two percent of CIO respondents said Epic had recently disappointed them.

Epic is often purchased with the rationale that it will improve patient care, but physician and nurse executives aren't convinced that's actually happening. Perhaps that's too much to ask of any IT system, but CEOs who sign up for Epic expecting quick care improvement might want to set modest expectations.

CIOs are fairly happy with Epic's ability to exchange information inside and outside their organizations, but CMOs are far less complimentary. That's an area of opportunity for CIOs who, along with Epic, may or may not be seen as obstructionist in the exchange of information outside the four walls.

I thank our survey respondents for providing their thoughts from the front lines and thanks again to <a href="peer60">peer60</a> for facilitating the interaction through their Reaction ecosystem.

#### About peer60

We created the Reaction research ecosystem and methodology. It is the fastest, most effective way to engage with healthcare providers almost anywhere in the world. Organizations of all sizes use Reaction to:

- Conduct C-Sat and NPS research
- Test product messaging, features, and pricing
- Develop a deep understanding of brand reputation...good or bad...and why
- Size up markets and the competition
- Identify which buyers are truly in the market for specific solutions or services
- Hone in on the easiest to reach replacement markets
- Engage with providers about their interests before major events
- Launch post-event follow-up with booth visitors
- Perform rapid win/loss research
- Create, and deliver, marketing content such as white papers
- ...the list goes on and on...

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