



# LeanTaaS iQueue for Infusion Centers 2022

Optimizing Infusion Operations through Predictive Analytics

## LeanTaaS

### Why This Spotlight?

Operational limitations—such as variable staff and patient availability—can make it difficult for healthcare organizations to effectively manage infusion scheduling. This often leads to volatile workloads in which resources may be both under- and overutilized in the course of a single day. LeanTaaS iQueue for Infusion Centers leverages machine learning and predictive analytics to optimize scheduling templates, level load daily schedules, and flag future problem days for preventive action. This report examines customers' experiences and satisfaction with iQueue for Infusion Centers.

## LeanTaaS iQueue for Infusion Centers

### Optimizing Infusion Operations through Predictive Analytics

### What Does iQueue for Infusion Centers Do?

(A Customer Explains)

"The LeanTaaS system uses analytics and machine learning to create templates for us to schedule patients for infusions. . . . The LeanTaaS system allows us to level load our schedules. The system uses predictive and historical data specific to our organization and needs, and the system allows us to maximize chair capacity, maximize nurse staffing ratios, and do more infusions in a shorter amount of time than we previously could."  
—Director

### Bottom Line

All respondents are satisfied with iQueue for Infusion Centers. Customers use the solution to optimize chair capacity and staffing ratios, and have experienced outcomes such as decreased wait times, increased patient volumes, and reduced staff overtime. The solution's strengths also include high-quality data and analytics as well as partnership and collaboration from LeanTaaS. Some respondents indicate they would like to see improved training and additional functionality.

### Key Competitors (as reported by LeanTaaS)

Allscripts, Cerner, Epic

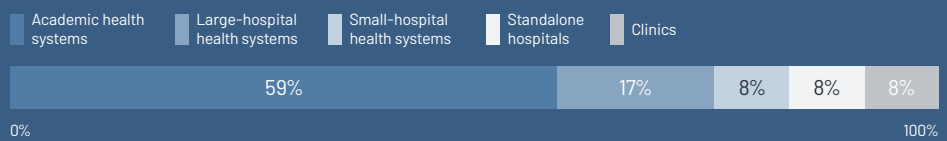
### Number of Customers Interviewed by KLAS

15 individuals from 12 unique organizations (out of 23 unique organizations provided to KLAS)

### Top Reasons Selected

Unique solution and functionality, peer reference, reduction of challenges associated with scheduling

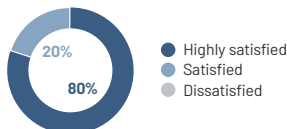
### Survey Respondents—by Organization Type (n=12)



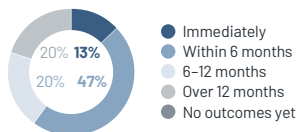
## LeanTaaS iQueue for Infusion Centers

### Customer Experience: An Initial Look

#### Overall Customer Satisfaction (n=15)



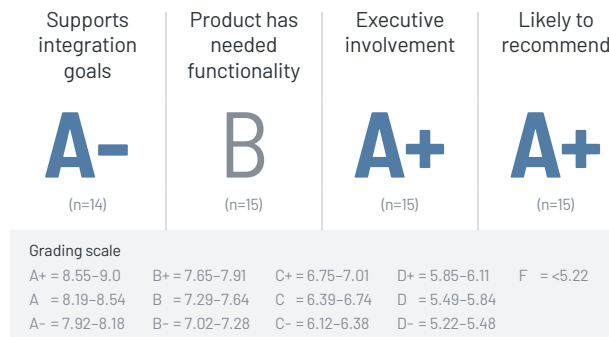
#### Time to See Outcomes (n=15)



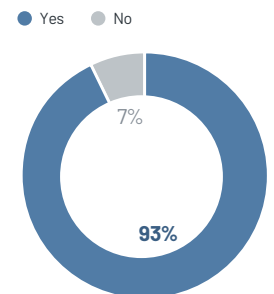
#### Outcomes Expected by Customers

Outcome	Status
Achieved	✓
Unexpected outcome	★
Pending	⌚
Not achieved	✗
Level load schedules to optimize space and resources	✓
Increase patients per hour/day without adding more resources	✓
Reduce staff overtime and missed breaks	✓
Decrease wait times	✓
Easily schedule patients	✓

#### Key Performance Indicators (1-9 scale)

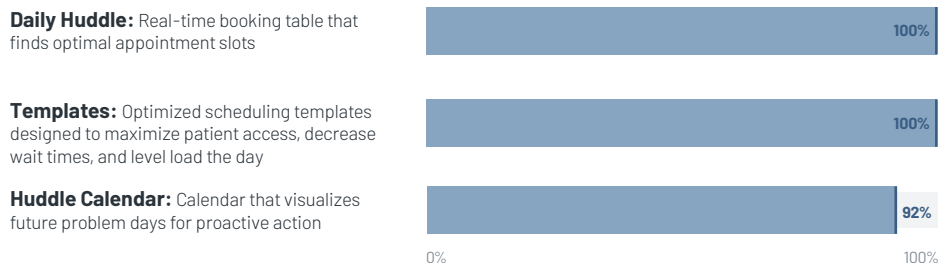


#### Would you buy again? (n=15)



#### Adoption of Key Functionality

Percentage of interviewed customers using functionality (n=12)



## Strengths

Various outcomes, including decreased wait times, increased patient volumes, optimized scheduling, and reduced staff overtime



*"iQueue for Infusion Centers helps us keep the patient flow going and reduces our wait times. We are seeing more patients now than we ever have before. Regarding capacity optimization, the application helps ensure that we are scheduling our appointments at the right times to see the most patients that we can. We are also doing a much better job of managing our staff when it comes to lunches and overtime and such." —Director*

High-quality data and predictive analytics

*"The outcomes definitely come from the solution's reporting, dashboards, and analytics. We can retroactively go back and see where our problem areas were and where our delays are, and then we also have that in a future-looking capacity to see overall where we are going to run into time crunches or where we just need to reallocate patients to different resources. Everything is pretty transparent and visible just on one nice little screen." —Manager*

Vendor provides strong partnership and collaboration to their clients

*"LeanTaaS is there for us as much as we want them to be. That is one of their key strengths. If we ask them to, the vendor will come on-site and tweak as much of the system as we want. If we get a template that doesn't work, the vendor will change that template for us. LeanTaaS is phenomenal about things like that." —VP/executive*

## Opportunities

Several respondents note opportunities to further develop the solution, including more multisite functionality



*"I would like to see more functionality with the tool so that we can leverage it between sites, not just at each individual site. Right now, we can't move our patients between sites. That functionality is on the vendor's horizon, but I would tell the vendor to make it happen faster. It would be a game changer if LeanTaaS had that interoperability within the product." —Director*

A few customers indicate additional training resources would be beneficial

*"There could have been better training so that we knew how we were going to use the product. I have seen live demos of the product with things that were not included in our version. Having a trial version of the product for us to play around with and explore would have been very helpful." —Manager*

## KLAS' Points to Ponder

**The Positives:** LeanTaaS provides a solution for optimizing capacity at infusion centers. Efficient use of infusion chairs and care environments produces a quick breakeven and impressive ROI opportunities. iQueue for Infusion Centers improves patient satisfaction by reducing wait times and improves nurse frustration and burnout by reducing overtime and improving nurse workflows to include appropriate breaks. The system uses machine learning algorithms to provide predictive and prescriptive insights for improving infusion center operations.

Organizations should consider the following:

### The Solution's Long-Term Viability in Healthcare

Infusion centers provide a critical service for patients with severe illness. The ability to drive high levels of patient satisfaction may impact reimbursement, and the optimization of nurse workflows will reduce staffing challenges. iQueue for Infusion Centers is well designed to deliver these capabilities for organizations with experienced change management and project management teams. While iQueue for Infusion Centers provides features that are functionally superior to current EMR capabilities, EMRs are likely to become future competitors. Highly functional EMR and data warehouse interoperability will help iQueue for Infusion Centers remain competitive.

### Impacts and Trade-Offs of the Underlying Technology

iQueue for Infusion Centers' technical architecture is consistent with other digital technologies we have researched and will support additional product and client growth. EMR interoperability is a key component for operational success with iQueue for Infusion Centers and must be designed appropriately. Customers would like the machine learning algorithms to drive patient

scheduling automatically versus recommending slots for users to add. iQueue for Infusion Centers provides robust reporting and analytic capabilities, and additional developments will only improve the system's offerings.

### Infusion Analytics

As with all healthcare service operations, the ability to capture and evaluate metrics is needed to drive better patient satisfaction, improved patient safety, cost reductions, reimbursement increases, care standardization, and clinician adoption and satisfaction. Infusion center metrics should include utilization data for infusion type, infusion service environment, patient type, treatment duration by appointment type, and treatment volume as a foundation. Infusion analytics must be integrated with the enterprise analytics and data warehouse environments to include SDOH data and outcomes data that will improve evidence-based care protocols for the infusion treatments.



**Mike Davis**

HCIT market research and analysis expert with 40+ years of experience

### Learning Networks

iQueue for Infusion Centers has created a learning network for their customers to drive optimal product use while also gathering insights for enhancing the solution. While established vendors typically convene such user groups, the groups may not actually drive effective collaboration between users. User groups are usually held annually, and this is not optimal for creating collaborative exchanges. Learning networks with regular meetings may be more effective venues for customer exchanges related to change management, product deployment, template changes, and analytics insights.

# LeanTaaS: Company Profile at a Glance

## Founder

Mohan Giridharadas

## Year founded

2010

## Headquarters

Santa Clara, CA

## Number of customers

135+ total unique customers

## Number of employees

~300

## Healthcare market

National

## Revenue model

SaaS subscription revenue model that is priced on a per-asset, per-month basis and allows customers unlimited access to solutions and expertise; money-back guarantee

## Target customer

Infusion centers, hospitals, and health systems



## Healthcare Executive Interview

**Mohan Giridharadas,**  
Founder and CEO

### How would your customers describe your solution?

Our customers would say that we optimize their utilization of infusion centers, inpatient beds, and ORs. They can see more patients (higher access) and see them faster (shorter wait times, cases scheduled sooner, discharges happening sooner). We do this by providing software solutions that combine Lean principles, predictive and prescriptive analytics using AI, and machine learning algorithms to transform hospital and infusion center operations. LeanTaaS' software is used by more than 135 health systems across the nation; they rely on the iQueue cloud-based solutions to increase patient access, decrease wait times, reduce healthcare delivery costs, and improve revenue.

### What is LeanTaaS' biggest differentiator?

LeanTaaS' biggest differentiator is our ability to deliver significant demonstrable ROI through our tools at scale. This ROI ranges from 6–20 times the investment, generating \$20,000 per year per infusion chair, \$9,000 per year per inpatient bed, and \$500,000 per year per OR. Customers typically recoup their investment within three to six months post-implementation, and LeanTaaS takes accountability for driving process and culture changes to achieve impact. We have the utmost confidence in our product and guarantee satisfaction with a "cancel anytime" option. Our secret sauce is combining domain expertise in hospital operations, Lean methodology, applying the right data science techniques for the right problem, and software engineering.

### Is your solution integrated into a core system (such as the EMR) or is it a standalone?

The LeanTaaS iQueue suite of solutions integrates with customers' existing EMRs to generate far more accurate predictive and prescriptive analytics. iQueue requires only a small amount of data to create a unique AI/ML fingerprint that can accurately model the stochastic variation of capacity needs unit by unit, hour by hour, and day by day to predict demand and match supply in real time. The iQueue suite of solutions is cloud based so that end users can access data anytime, anywhere via a computer or mobile device.

## Solution Technical Specifications (provided by LeanTaaS)

### Cloud environment

AWS

### Development platform

Java, Python, Typescript

### Database environment

MySQL and PostgreSQL

### Mobile application environment

Web applications mobile responsive,  
no native mobile applications

### Security platform

NIST, SOC 2

### Confidentiality

HIPAA and business associate agreements

### Data encryption

AES 256 at rest and in motion

### Integration approach

HL7 2.x, CSV Extracts, and FHIR

### HITRUST certification

In progress

### AI

Yes

# Report Information

## LeanTaaS Performance Overview

All standard software performance indicators

Culture		
Proactive service (1-9 scale)	(n=15)	A+
Keeps all promises (percent that said yes)	(n=15)	100%
Product works as promoted (1-9 scale)	(n=14)	A

Loyalty		
Would you buy again (percent that said yes)	(n=15)	93%
Part of long-term plans (percent that said yes)	(n=15)	100%
Forecasted satisfaction (1-9 scale)	(n=14)	A+
Overall satisfaction (1-9 scale)	(n=15)	A
Likely to recommend (1-9 scale)	(n=15)	A+

Operations		
Quality of training (1-9 scale)	(n=15)	B+
Quality of implementation (1-9 scale)	(n=15)	A
Ease of use (1-9 scale)	(n=15)	B+

Product		
Overall product quality (1-9 scale)	(n=15)	A
Product has needed functionality (1-9 scale)	(n=15)	B
Supports integration goals (1-9 scale)	(n=14)	A-
Delivery of new technology (1-9 scale)	(n=13)	B+

Relationship		
Quality of phone/web support (1-9 scale)	(n=15)	A+
Executive involvement (1-9 scale)	(n=15)	A+

Value		
Money's worth (1-9 scale)	(n=14)	A-
Avoids nickel-and-diming (percent that said yes)	(n=13)	100%
Drives tangible outcomes (1-9 scale)	(n=15)	A

Grading scale				
A+ = 8.55-9.0	B+ = 7.65-7.91	C+ = 6.75-7.01	D+ = 5.85-6.11	F = <5.22
A = 8.19-8.54	B = 7.29-7.64	C = 6.39-6.74	D = 5.49-5.84	
A- = 7.92-8.18	B- = 7.02-7.28	C- = 6.12-6.38	D- = 5.22-5.48	



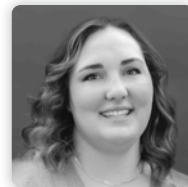
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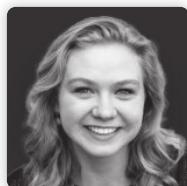


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Improving the world's healthcare through collaboration, insights, and transparency.

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KLAS makes significant effort to identify all organizations within a vendor's customer base so that KLAS scores are based on a representative random sample. However, since not all vendors share complete customer lists and some customers decline to participate, KLAS cannot claim a random representative sample for each solution. Therefore, while KLAS scores should be interpreted as KLAS' best effort to quantify the customer experience for each solution measured, they may contain both quantifiable and unidentifiable variation.

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## Note

Performance scores may change significantly when additional organizations are interviewed, especially when the existing sample size is limited, as in an emerging market with a small number of live clients.

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