Data Driven Service Desk

by Hinah Nasir & Andrea Steffes-Tuttle
About the Authors

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Hinah Nasir is the Service Desk Manager for Phoenix Health Systems, Inc. In her role at Phoenix, Hinah manages a team of eleven customer-focused IT professionals to provide support to hospitals across the US.

With almost ten years’ experience in healthcare IT support she has superior skills in the areas of incident management, change management, customer satisfaction enhancement, team building and training, documentation, complaint handling, and resolution.

Hinah holds a B.S in Computer Science from the Loyola University New Orleans.

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**Andrea Steffes-Tuttle, Marketing Director**

With a background in technology and ten years experience in marketing, Andrea has expertise in multi-channel communication strategies, digital marketing & advertising, and a passion for the ever-evolving IT industry.

Andrea manages Phoenix’ integrated marketing initiatives, which includes the development and promotion of online and offline strategies, and brand management. Prior to Phoenix, Andrea held marketing positions in both the technology and lifestyle industries.

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The New Hospital IT Service Desk

Simply stated, the Service Desk is the face and voice of IT.

With the inexorable push to meaningful use of information technology in healthcare, hospitals are deluged today with data that is captured and processed by increasingly complex computer systems. While a major role of the IT department is implementing and managing these systems, *customer-facing support may be its most important job*. Physicians and other healthcare workers must be enabled to use required software, and quickly supported with correct answers when they need help.

If your Service Desk isn’t supporting your users to their satisfaction, your IT department will be seen as incompetent and inefficient, regardless of its implementation and management accomplishments.

Nevertheless, many IT departments put support on a back burner, even if unintentionally, due to heavy work loads and urgent deadlines. Some hospitals still don’t have dedicated Service Desks, relying instead on operations staff to grab calls as they can. Others may have a Service Desk that is cobbled together with outdated methods, poorly trained staff, and inadequate technology.
Cutting Corners with IT Customer Service...

...is a huge mistake; it hurts the IT department’s credibility, impedes hospital operations, and may even jeopardize patient care.

Today, hospitals of almost every size should have a dedicated Service Desk that is professionally standardized and structured to increasingly build its value through ongoing data collection and analysis. If Service Desk staff are not enabled to perform their job optimally, it’s likely that no one’s needs are being properly met – neither their users nor the Service Desk analysts themselves.

As a company that prides itself on our outsourced hospital Service Desk support, we hold ourselves to a high standard of performance. Diligently enforcing ITIL standards, we have honed our methods for Service Desk optimization and performance tracking. These methods are rooted in quality data.

We understand that an ITIL-based, data-driven Service Desk can increase efficiencies, improve processes, and enhance end-users’ satisfaction. Overall, it can create a more productive work environment for both IT service providers and their customers throughout the hospital.
Empower the Service Desk

Using proper tracking and data analysis results in a well-performing Service Desk. Your Service Desk representatives will become more productive, valuable – and valued. **Your Service Desk should become a significant factor in the efficiency and productivity of your hospital’s staff.**

With each new stage in the trajectory of hospital information technology, it is likely that the demands on your support staff are increasing. This guide covers techniques that leverage data to optimize Service Desk processes and analyst productivity, such as:

- Implementing Ticket Management Policies
- Empowering Staff to Track Activities
- Tracking Hospital IT Trends
- Building a Service Desk Knowledge Base
- Top Ten Service Desk KPIs
The Importance of Trends

Hospital IT Service Desk analysts review copious amounts of data on a daily basis. Yet many hospitals fail to see the value to be gained from collecting this data systematically, trending it, and identifying emerging problem areas.

Unfortunately, as the adage says – you can’t manage what you don’t measure.

IT service leaders need to develop standardized service data measurement and reporting processes that are aligned with hospital operational goals. The results of performing trending analyses will enable collaboration with user groups to produce IT service improvement plans that will eliminate recurring incidents, and often resolve causal problems to prevent many incidents from occurring again.

Trends Revealed
The ability to identify trends opens the door to opportunities for providing additional support to the areas that need it and minimize problems over time. Identifying the volume drivers / recurring issues, reveals the types of contacts that require the most attention. With this insight, issues can be addressed through training, systems changes, implementation of automated solutions, process standardization, etc.
Optimize Processes Through Trending

It’s important to align customer satisfaction goals with quality monitoring goals. Using an organized incident-tracking process allows your organization to monitor essential performance indicators such as:

- First Call Resolution Rate
- Average Speed-to-Answer
- Average Time-to-Resolution
- Total Calls Received
- Incident Tracking Analysis
- End-User Satisfaction
- Service Desk Analyst Utilization

Reviewing these performance metrics reveals areas of improvement and opportunity. Expectations should be set with users, which align with realistic performance goals. Once the goals are set, review and refine monthly.
The Power of Ticketing

In many hospitals, if a customer service ticketing system is in place, it often is not used consistently. Further, issues are not accurately tracked, even if they do make it into the ticketing system. Reporting, if attempted, is inaccurate or impossible. This is a major threat to the effectiveness of a Service Desk.

For a Service Desk to successfully manage end-user problems, the most basic process needs to be implemented – ticket management.

Unstandardized ticket management is a barrier to the very objective of the Service Desk – improving processes and productivity.

For a Service Desk to have consistent value to any healthcare organization, ticket management policies must be in place. There are three important considerations to make when defining your policies.

No Service Without a Ticket
Establish Ticket Criteria
Differences Between Incidents and Problems
No Service Without a Ticket

It is common that problems requiring time and manpower get resolved without ever entering the system. This is generally a result of users contacting the IT staff directly or the IT staff not being diligent in their ticket creation.

If you want useful data, it is imperative that a ticket be created for every incident.

To solve this problem, IT leaders should investigate more user-friendly ticket creation solutions, to make ticket creation as efficient as possible.

Allowing ticket creation through email, voicemail, and/or a web portal are good alternatives to a standard ticketing system and takes some of the hassle out of logging tickets. This provides your service staff with the tools they need to perform their jobs and improve the overall performance of the Service Desk.
Ticket criteria consists of the metadata attached to each ticket. This data – such as Type, Category, Sub-Category, etc. – is essential to getting the ticket to the right analyst and extremely useful for reporting purposes. To make the data usable, the criteria needs to be simple.

Some ticketing tools force the user to make eight choices when creating a ticket with three choices would be just as effective. It’s best to choose a ticketing solution that requires a minimal (but meaningful) number of choices when creating a ticket.

**Important Criteria to Include**

**Referenced Application**: No matter what the ticket type, there should be a referenced application. This is probably the most significant field as it allows you to see which applications are causing the most problems.

**Area**: The area or department within the hospital should always be recorded. This facilitates reporting by area, including number of tickets, survey results, etc.

**Submission Method (Email, Phone, Web, etc.)**: This enables you to determine if your users are using the most efficient means possible to submit tickets.
Incidents versus Problems

Most organizations do not know or track the differences between incidents and problems. Let’s clarify...

**Incidents are individual issues. Problems are the underlying cause of the incidents.**

For example, the hospital’s mail server goes down and three users call, reporting that they cannot access their email. Under this scenario, there should be an *incident ticket* created for each of the users and a *problem ticket* created for the server issue. Separating incidents and problems greatly increases the organization’s ability to track and trend data more effectively.

Establishing clear policies that enforce standard processes sets your team up for success. By communicating and requiring the use of defined methods, you are empowering your team to provide excellent service to users and the organization.
Empowering Staff to Track Activities

Once ticket management policies are implemented, an approach detailing how analysts will be empowered to log tickets should be defined.

At Phoenix, we employ five strategies for improving activity tracking.

1. Use of a Quality Ticketing Application
2. User Contact Records in the Ticketing Application
3. Quick Ticket Templates
4. Standard List of Questions
5. Integration and Asset Management Tool
A good Service Desk ticketing system enables improved tracking and efficiency. If you have a poor system in place, it’s more likely that all of the work you’ve done to impose ticket tracking rules will be ignored, and hospital staff will find workarounds to avoid the system.

**A good ticketing application has the following characteristics:**

- Ticket auto-creation
- Built in knowledge base
- Efficient search
- Asset management feature
- Web portal
- Ability to track purchase orders and software licenses linked with active directory

If your system has the features above and your hospital staff has been trained in using them, analysts will be more likely to follow ticket tracking protocol.
User Contact Records

A ticketing system that stores user contact information makes it easier to populate end-user information. The time saved by not having to enter user details will result in faster call resolution time and a better service experience for both parties.

Service Desk staff can perform their jobs more efficiently, and users can return to their jobs sooner.

Quick Ticket Templates

It is likely that your Service Desk receives reports of recurring issues. Creating ticket templates eliminates the need for creating an entirely new ticket every time a problem is reported. Instead of completing a myriad of fields describing the problem, it is faster and easier to identify the problem from a curated list.
Standard List of Questions

A standard list of questions should be provided to your Service Desk analysts. The list should address the most common problems they must handle, and the information required for improved resolution and trend tracking.

Examples of potential information that should be recorded:

• Errors experienced
• Actions taken to troubleshoot
• Previous activity on the issue
• Area of issue

Asset Management Tool

Integrating an asset management tool with your ticketing application accelerates the speed of ticket logging and troubleshooting. If your analysts have asset information at their fingertips, they can provide quicker entry and more accurate data regarding equipment and software issues.
Trending is Essential

Trending is essential for identifying problems in the IT service delivery process. Using trending, a hospital IT department can proactively handle problem management and avoid the occurrence of problems before they get to a larger scale and significantly impact the hospital staff and its patients.

**Trending provides a number of benefits:**

- Exposes externalities that impact service performance
- Reveals the root cause of problems
- Provides new perspectives from disparate data
- Enables intelligence, beyond standard reporting
- Measures service performance
- Improves service delivery
- Provides context for decision making

All of this would not be possible without the capture of data by the Service Desk. Other areas of IT like network management and clinical systems should also collect and trend data. Combining the data from these areas and performing trend analysis enables an immense improvement in the quality of IT service.

Another great benefit of trending data is that it makes it easier to monitor the effects of technical changes in the environment in a useful way. You can find out the extent of the impact on users and sites to enhance the change management process.
Build a Knowledge Base

Creating and building a knowledge base is a critical objective for an IT Service Desk. A current knowledge base of solutions allows Service Desk staff to provide faster resolution times and more useful support. For a knowledge base to be effective, it needs to be systematically organized and constantly maintained.

**Acquiring data, turning that data into solutions, managing those solutions, and applying them consistently to your users’ needs are important steps in providing exceptional and efficient IT service.**

The process of building a knowledge base requires two components:

- **Knowledge Acquisition**
- **Knowledge Base Maintenance**
Knowledge Acquisition

The primary method for acquiring information and compiling a knowledge base is through the review of ticket data gathered from end-users.

Reviews of ticket data should include:

- Recurring issues
- Uncommon issues
- Time-consuming problems
- Frequently asked questions

Notes for knowledge base articles from the data should be captured, particularly problem descriptions and resolutions. Once a list of problems and resolutions is compiled, all resolutions must be verified, in order to create a new, well-organized knowledge base article.

Another approach to building your knowledge base library is to create a list of the problem areas that are most frequently reported. Determining where IT resources are wasted when dealing with issues will help you address inadequacies in your knowledge base.

As an example, patients were appearing as a gray block on the daily schedule in the MediLinks application and therapists were unable to document on those patients. The application analysts researched the issue, provided a simple fix and documented the fix in the knowledge base. If the problem occurs again, the Service Desk can now identify the issue, explain the cause to the user, and apply the fix.

Categorizing tickets by problem area provides important information for creating knowledge base solutions.
Knowledge Base Management

Constantly changing processes in hospital IT demand that the knowledge base be periodically reviewed and regularly updated. The best way to ensure that your knowledge base remains up-to-date and relevant is through the consistent review of tickets. The best way to ensure that your knowledge base remains up to date and relevant is through consistently reviewing tickets, and updating knowledge base solutions accordingly. It’s also important to create solutions that lead to a higher First Call Resolution.

For example, often, Java version changes can cause compatibility issues with hospital applications. If the issue is planned for or identified early, the proper solution can make for a speedy First Call Resolution.

Finally, the management of knowledge includes organizing, sharing, and using the information to create value and improve performance for the entire organization.

- Service Desk analysts should be know that the knowledge base exists
- Analysts need to be educated on the use of the knowledge base
- Analysts should be enabled to perform ticket tracking
- Review of the existing knowledge base should be prioritized
- The knowledge base should be updated regularly

An effective knowledge base empowers analysts to solve problems, decreases frustration, and increases efficiency. To get the most out of your knowledge base solution, it must be well organized and easily searchable. Meaningful descriptive titles and relevant keywords mean that analysts don’t waste time searching for the solution they are seeking.
Service Desk KPIs

Service Desk Key Performance Indicators (KPIs) are measurable outcomes that reflect the success or failure of the service. KPIs provide insight into the effectiveness of an organization’s processes. They shed light on which processes meet the operational goals of the organization and expose those that fail.

Consistent tracking and review of defined KPIs ensures that issues that might go unnoticed are addressed. By defining and setting standards using KPIs, Service Desk analysts are kept accountable, and an elevated level of service is demanded.

To monitor performance, and maintain the highest level of service, Phoenix tracks ten primary KPIs.
KPIs You Should Track

1. **Number of Contacts Received**
   To determine the efficiency of your Service Desk staff, it is important that the average number of contacts handled per Service Desk analyst be tracked. This reveals performance areas that need to be addressed. It is also helpful to investigate the number of incidents per problem type and category. Lastly, reviewing the incoming ticket volume trend will expose times of the week, month, or day that incur an influx of tickets, which will likely expose problem areas to address.

2. **Call Talk Time and Hold Time**
   Reviewing talk time and hold time is vital. A user who is calling a Service Desk for assistance, is not interested in spending much time waiting. He or she wants the issue solved quickly. These metrics will reveal the source of efficiency inadequacies such as call hold times. It is important when reviewing this metric that the average wait time prior to call abandonment be reviewed as well. Continuously working to cut down on talk time and hold time will naturally improve customer satisfaction.

3. **Knowledge Sharing**
   It’s important to monitor the Knowledge Base repository. The frequency of solution creation and the number of updates should be watched carefully. The knowledge base is only as good as the information shared within it. If updates and new solutions aren’t contributed regularly, the knowledge base will become obsolete.
Ten KPIs You Should Be Tracking

4. **Turnaround Time**
Tickets that take too long to resolve result in very unhappy users. A successful Service Desk must maintain agreeable turnaround time on incidents. To do this, we suggest tracking the average time it takes Service Desk staff to acknowledge and close a ticket. Ticket escalations due to late incident resolutions should also be monitored. This can be particularly enlightening when looking at cost per incident for after hours support.

5. **Customer Satisfaction Survey Rating**
This is where the rubber meets the road and levels of Service Desk performance are revealed by the most important people, the customers. To measure the success of this metric, there should be a regular review of the number of surveys sent versus the number of surveys completed. After noting the return rates, the percent of satisfactory (hopefully more than satisfactory) survey results should be reviewed, to determine what problem areas should be addressed, such as poor performance, recurring incidents, etc.

6. **First Call Resolution Rate**
This metric measures the percentage of incidents resolved on the first call. Quick resolutions should be the goal of both Service Desk analysts and their users. Reviewing the percentage of incidents resolved on the first call and the number of incidents resolved remotely by the Service Desk, reveals the success levels of the operation.
Ten KPIs You Should Be Tracking

7. **Cost Per Incident**
   Evaluating the cost of staff time and resources by incident provides insight into the efficiency of the Service Desk. This metric reveals problem areas where your Service Desk might be losing money and enables leadership to address those areas to ensure profitability. It is often useful to calculate the cost per incident separately for after-hours and weekend coverage, as these timeframes typically require either “on-call” resources at overtime rates or a Service Desk analyst who is not fully utilized. Either scenario can drive up the cost per incident for after-hours support.

8. **Recurring Incidents**
   Every Service Desk should watch out for recurring incidents. Repeat incidents should be given higher priority and resolved at the root of the problem, if possible, to avoid unnecessary demand on the Service Desk staff.

9. **Analyst Satisfaction**
   A happy staff is an effective staff. To monitor the job satisfaction of your Service Desk analysts, attention should be given to their turnover rate, their satisfaction, and the volume of calls handled per analyst. If there are glaring issues, they should be addressed immediately.

10. **Number of Unresolved Incidents**
    The existence of unresolved incidents signals recurring problems, ineffective Service Desk staff, and/or unhappy users. Incidents need solutions. Tracking this metric ensures that unresolved incidents are managed properly and that the causes of those incidents are addressed.
What’s Next?

In a hospital environment, objectives and requirements are changing constantly, and the IT department is expected to assist in meeting those objectives.

When performed and reviewed regularly, meaningful data collection, trending, and regular performance review can greatly aid in improving the hospital’s overall performance.

Using the techniques covered in this guide, your organization will improve not only its IT support services, but results will likely be seen organizational-wide.

If you’re seeking further guidance in your Service Desk efforts, we can help. Our seasoned support experts are ready and willing to answer your questions and consult with you on the best strategies for optimizing your IT support efforts.
Our on shore Service Desk Center supports many healthcare organizations like yours.

With today’s increased IT demands, it’s difficult for internal Service Desks to keep up with the needs of their users. Meaningful Use and new EHRs have added to the burden on hospital IT departments, and many are looking outside their organization to meet the needs of their physicians and other users. At Phoenix, we work with our clients to design a solution to provide either supplemental or full time Service Desk support.

- Seamless 24 x 7 support
- Healthcare-only focus including experience with all major EHR vendors
- Top-of-the-industry service and user satisfaction levels
- Reduced costs
- Smooth, fast transition and implementation

Call or email us to begin improving IT user satisfaction in your hospital.

Let us know how we can help you. Contact us by email or phone:

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