



# Streamlining Imaging Access

Pairing research best practices with  
data-driven insights

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# Executive summary

Imaging often serves as the health system's front door, meaning that seamless access is critical to securing market share for far more than just diagnostic tests.

This excerpt begins with a description of new access standard that patients are expecting, and then offers three lessons for imaging leaders seeking to deliver streamlined imaging access to better capture physician referrals and the choice of patients shopping for care.

INCLUDED IN  
THIS EXCERPT

## **Introduction: The new access standard**

### **Lesson 1:** Diagnose access vulnerabilities

Tactic 1: Benchmark imaging program access

Tactic 2: Identify opportunities to improve imaging capacity

### **Lesson 2:** Advance imaging scheduling

Tactic 3: Address scheduler challenges

Tactic 4: Tailor scheduling model to meet consumer demands

Tactic 5: Facilitate accurate, efficient physician ordering

Tactic 6: Master the preauthorization process

### **Lesson 3:** Extend access across the continuum

Tactic 7: Reduce patient wait times

Tactic 8: Offer opportunities for integrated image and report sharing

IN FULL  
RESEARCH  
REPORT

# The new **access standard**

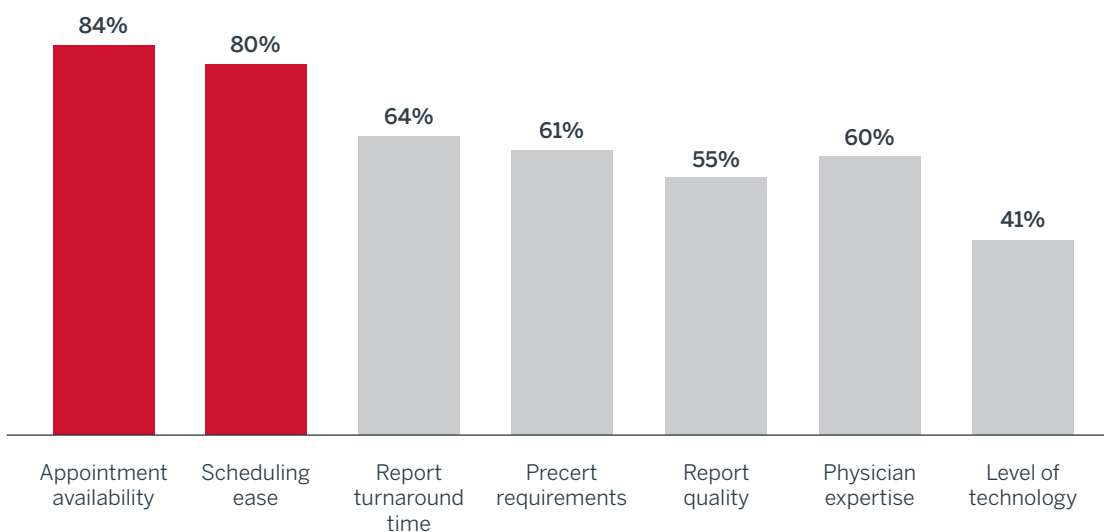
## Streamlined access crucial to maintaining competitive edge

Ensuring seamless access is at the heart of imaging's value proposition. In fact, according to a recent member survey, access-related factors such as appointment availability and scheduling ease, were ranked as the most important competitive factors in any given market.

### Importance of competitive factors in your market

*Partnership respondents strongly agreeing*

n=56



Data from the 2015 Imaging Consumer Preferences Survey tells a similar story. Reviewing the top ten ranked imaging facility features, patients value many different imaging center attributes: low cost, convenient access, physician expertise. But, when looking at the factors that patients found the least appealing, half of the bottom ten factors were access-related.

As such, both sets of data suggest that access-related failures can have dire consequences for the outpatient imaging business.

## Top ten most appealing imaging facility attributes

1. My out of pocket costs for the imaging exam will be less than \$30
2. I will receive my results on the same day as my imaging exam
3. The provider is in-network for my insurer
4. The imaging facility has the most advanced level of technology for MRI
5. A radiologist who is specialized in reading this type of MRI will interpret my scan
6. Once I arrive at the facility, I will have to wait 5 minutes or less before I receive my imaging exam
7. The facility was recommended by my doctor
8. The imaging provider provides me with comprehensive and clear understanding of MRI procedure, medical condition, diagnosis
9. The imaging facility's quality scores are far above industry average
10. The imaging facility's patient satisfaction scores are far above industry average

## Bottom ten least appealing imaging facility attributes

58. I won't know how much the imaging exam will cost me until I receive the bill in a few weeks
59. **I will have to wait 2–7 days for an appointment for my imaging exam**
60. The imaging facility is near my grocery chain
61. My out-of-pocket costs for the imaging exam will be between \$200 and \$1,000
62. **I will have to travel more than 20 minutes to get to the facility**
63. **I will have to wait more than 5 days for my results**
64. **I will have to wait more than 7 days for an appointment for my imaging exam**
65. The imaging facility is in the mall
66. My out-of-pocket costs for the imaging exam will be over \$1,000
67. **Once I arrive at the facility, I will have to wait 60 minutes or more to receive the scan**

## Consumer expectations for access changing in health care

Given the importance of access to the imaging service line, it is important to note that consumer expectations for access and convenience have changed dramatically over the past few years. In today's market, consumers have access to almost anything at a click of a button. Notably, each of the examples below have one feature in common—they are each innovating on the traditional business model in their industry and are finding ways to meet consumer demands for convenience.



Need a taxi?

Online taxiing ordering app

UBER



Grocery delivery?

Instant grocery delivery service

Instacart



Hire a baby-sitter?

On-demand child care

Urbansitter



Laundry and dry-cleaning?

Laundry and dry-cleaning delivery

Washio

Source: 2015 Advisory Board Outpatient Imaging Access Survey; 2015 Imaging Consumer Preference Survey; Imaging Performance Partnership interviews and analysis.

## Expectations in health care are no different

### Retail clinic model meeting patient needs for convenient care

In many ways, health care is no different. Many of the same consumer preferences for easy access and convenience carry over. One of the ways the health care industry is addressing this consumer preference is through the retail clinic. The proliferation and success of the clinics to date is in part due to their ability to meet consumer preferences for easy, convenient health care options.

“Health Care for \$4: Are You Ready for Walmart to Be Your Doctor?”

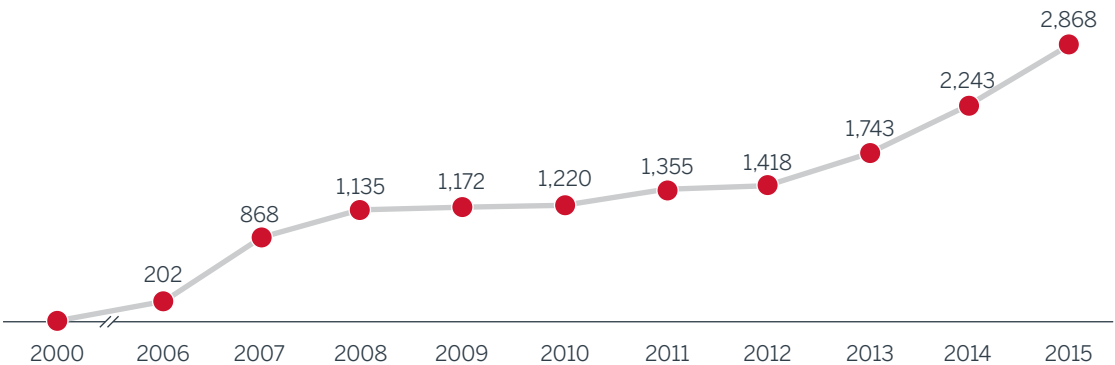
*Forbes*

“CVS Caremark Changes Its Name to CVS Health

*Boston Globe*

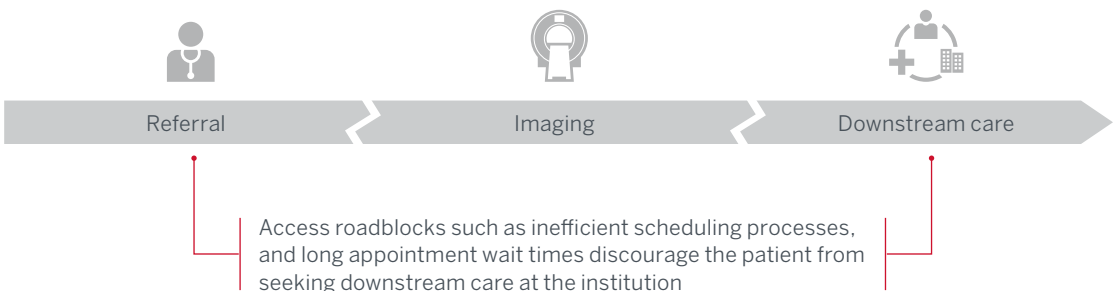
### Estimated total number of US retail clinics

Number of clinics, 2000–2015



## Redefining imaging access strategy

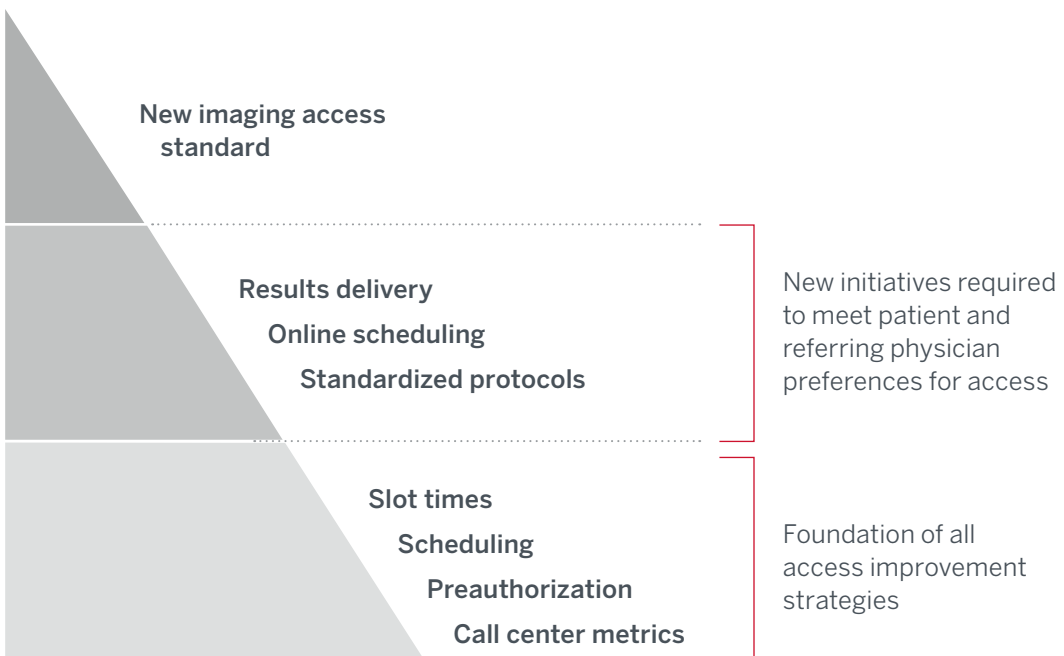
Inability to meet the new access standards does not have a negative impact just on imaging alone. Since imaging often results in downstream care for the health system, any imaging access breakdowns can cause downstream delays or volume leakage.



## New access standards require a new approach

Before diving into the best practices and tactics, we should define the term, “imaging access” as we use it in this report. Imaging access encompasses several issues including scheduling, slot time design, and preauthorization.

The full publication examines tactics for addressing traditional imaging access issues, as well as initiatives that address some of the newer patient preferences for convenience and accessibility. This excerpt will examine three of the eight tactics covered in the full publication.



## TACTIC 1

# Benchmark imaging **program access**

## Take a data-driven approach

Before imaging leaders look to improve access, it is important to measure current performance to have an understanding of program strengths and vulnerabilities. With access metrics, reviewing data in a vacuum provides little value. Program leaders should benchmark performance relative to the market.

Though imaging access performance is quantifiable, it can be difficult to find reliable, imaging-specific data.

### Sources of market intelligence



*Competitors*



*Referring  
physicians*



*Patients*

### Methods of acquiring market intelligence



*Benchmarks*



*Surveys*



*Mystery  
shopping*



*Physician  
liaisons*



*Patient  
councils*

# Imaging access benchmarks

## SUPPORTING DATA 1

### Imaging call center performance

n=32

Metric	25th Percentile	50th Percentile	75th Percentile
Call Wait Times	38 seconds	25 seconds	11 seconds
Call Duration	300 seconds	210 seconds	102 seconds
Call Abandonment Rate	7%	3%	2%
Percent of Orders Lost	5%	2%	0%

### Additional call center metrics to track

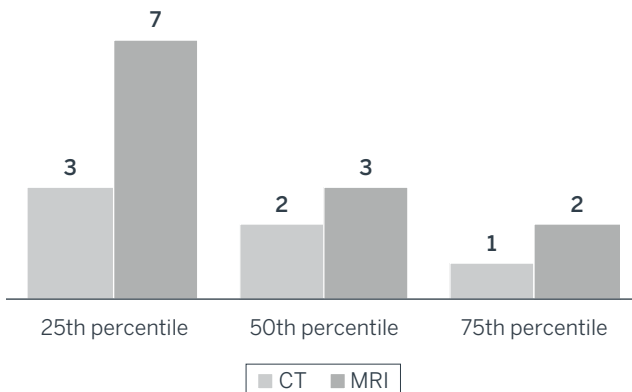
- › Total number of worked hours
- › Total number of calls
- › Number of staffed employees
- › Number of system transactions
- › Number of calls received
- › Number of external calls placed
- › Average hold time
- › Total hold time
- › Number of scheduling errors
- › Percent of calls answered
- › Exams per scheduler per day
- › Call volume per hour

## SUPPORTING DATA 2

### Outpatient CT, MRI imaging access

Time to third next available appointment (in days)

n=58



#### TOOL EXCERPT

### Imaging productivity and efficiency benchmarks

This tool provides imaging benchmarks across a variety of categories including access, volumes, staffing, equipment, order and turnaround time against a custom cohort of organizations.

Data from this tool was collected from our 2017 *Imaging Benchmarking Survey*, which was completed by over 120 organizations representing 192 facilities.



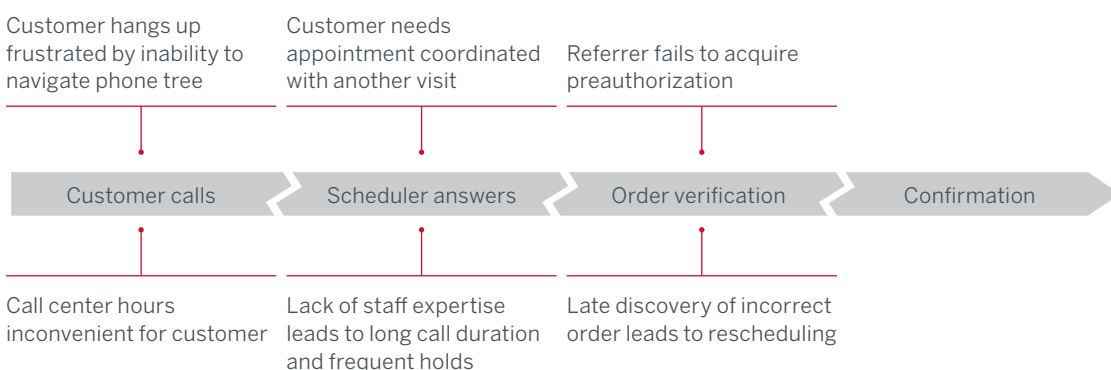
## TACTIC 3

# Address scheduler challenges

## Breakdowns in scheduling directly impact consumers

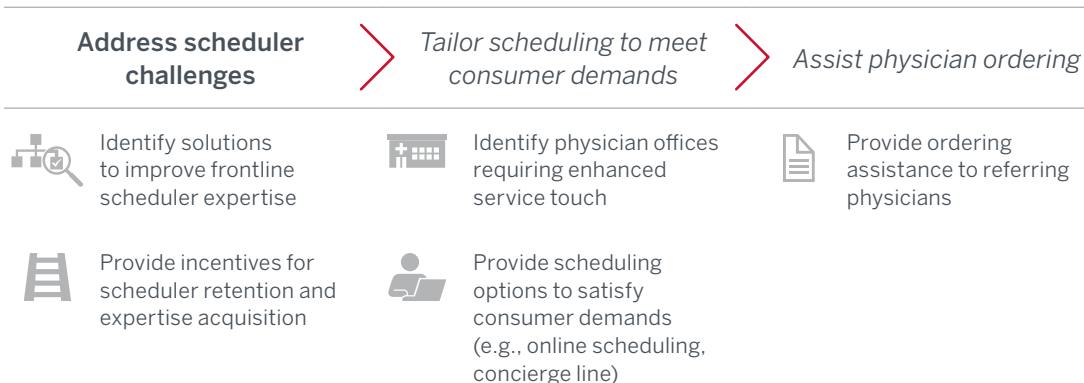
The scheduling department is often the first interaction a patient may have with an imaging program. As such, access improvement efforts should begin by examining the scheduling process.

Typically, the scheduling process is fraught with challenges. A single breakdown in the scheduling process can lead to delays that affect patient care and satisfaction. Some challenges to effective patient scheduling include:



When addressing these challenges, it is important to note that sequence matters. How you go about addressing each issue is important, and we recommend following the progression shown here. For example, there is no point in trying to meet consumer demands or provide support to referring physicians if you are still experiencing issues with the fundamentals with your schedulers.

### Step-wise approach critical to sustained improvement

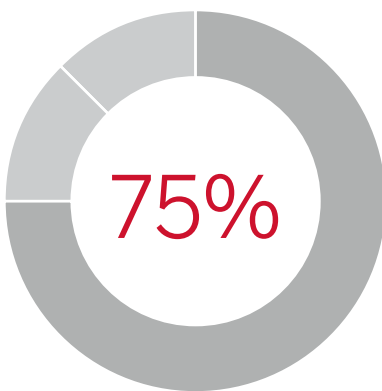


## Adapt to the challenges of centralized scheduling

Currently, most imaging programs use some variation of a centralized scheduling model to handle all scheduling requests. The rationale for this is that centralization allows for productivity gains and capacity management across the system. In fact, data from our Outpatient Imaging Access Survey shows that 75% of imaging programs have adopted either an imaging-specific or hospital-wide centralized scheduling model. While centralization has helped with resource management across the system, it is not without significant drawbacks. Challenges vary from institution to institution, but they tend to fall into issues related to scheduler performance or issues inherent to the model itself.

### Percentage of imaging programs with centralized scheduling

n=56



### Difficulties associated with centralized scheduling

#### Poor Consumer Experience

Customers forced to hold for prolonged periods while inexperienced scheduler seeks assistance

#### Difficulty Differentiating Services

Centralization can make it difficult for providers to offer elevated service to important referrers

#### High Turnover

Centralized models are prone to high turnover, which exacerbates challenges

St. Bart's Medical Center, a pseudonym, noticed that the lack of scheduler familiarity with radiology was negatively impacting access. With imaging accounting for over 75% of call volumes, these issues were significantly affecting call center operations.

The lack of imaging expertise led schedulers to make as many as 40 calls a day to the MRI department alone seeking assistance with scheduling. Although the technologists could always offer support, these calls resulted in workflow disruptions and negatively impacted the patient experience.

#### APPROACH 1: CLINICAL EXPERTISE SUPERVISOR

- 1 Patient calls scheduling department to make an appointment
- 4 Technologist halts work to examine schedule and address the issue



- 2 Scheduler struggles with complexity of the exam



- 3 Scheduler puts patient on hold and calls the modality in question to get clarification

# Support imaging scheduling staff

To address the scheduling challenges at St. Bart's, the imaging director successfully advocated for the creation of a clinical expertise supervisor to embed clinical imaging expertise in the scheduling department.



## Embedding imaging expertise in the call center

*Supervisor role combines clinical expertise with physician liaison duties*

### INTERNAL DUTIES

- › Oversees scheduler training and education
- › Assists with scheduling complex/expedited exams
- › Familiarizes themselves with all imaging sites

### EXTERNAL DUTIES

- › Travels to referring physician offices
- › Addresses customer complaints
- › Assists with scheduling for St. Bart's partners

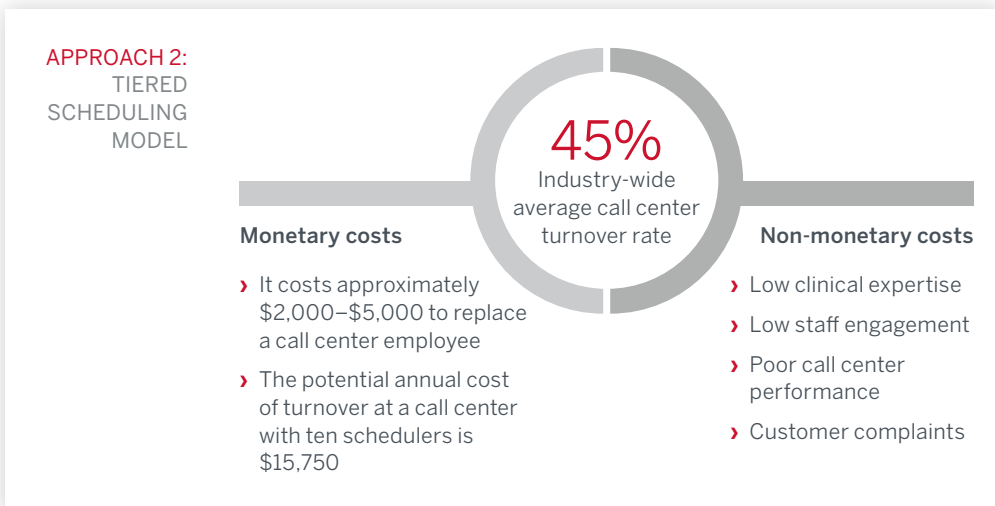
### Clinical expertise supervisor traits

- › Candidate(s) should have a clinical background, preferably as an MRI or CT tech
- › Ideal candidate should be an internal hire to ensure firm understanding of organization's culture and site-specific nuances
- › Strong interpersonal skills valuable for relationship building

A lack of expertise is not the only challenge with a centralized scheduling model. Centralized call centers often have high turnover rates. This turnover not only makes it hard to maintain clinical expertise, but it also has financial implications for the department.

One of the largest contributors to this high turnover rate is the lack of a career path for schedulers and the accompanying incentives that reward scheduler expertise.

Baptist Health South Florida implemented a scheduler career path that has significantly improved engagement and retention of staff.



## Tiered scheduling model provides career ladder

Leaders of Baptist's imaging call center decided to create a four-tier career path to reward scheduler specialization and improve retention.

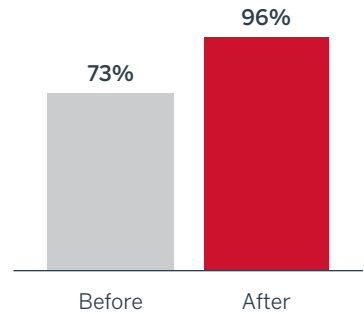
Employees start as a level one scheduler where they are responsible for scheduling calls from Baptist's employees and patients. These staff are trained to schedule basic imaging exams and can move to the level two scheduler position after a year, if they meet certain performance benchmarks.

Level two schedulers can take calls from physician offices and begin training in more complex modalities. The level of customer interaction and responsibilities continue to increase along the career ladder, ending with the team leads.

Team leads are responsible for supporting schedulers in much the same way as the clinical expertise supervisor, discussed earlier.

Baptist's career path led to immediate improvements in outpatient access and referring physician satisfaction.

### Percentage of physicians satisfied with access



## 80%

Of calls answered in 20 seconds

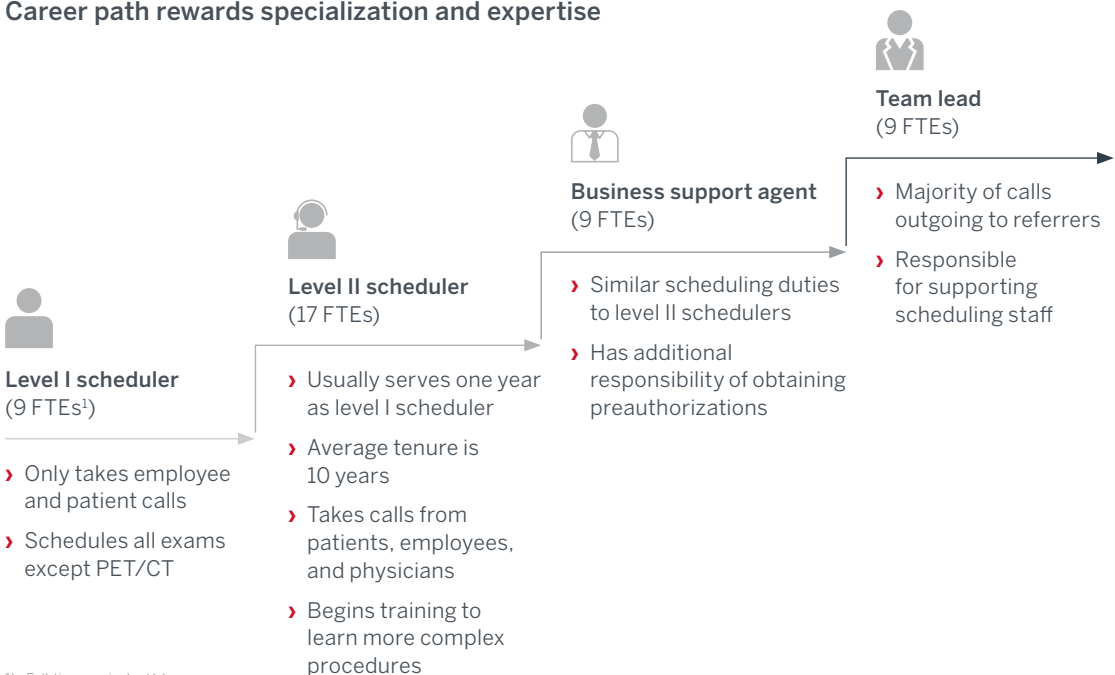
## 6.3%

Baptist's call center voluntary turnover rate

## 10

Current average tenure of scheduler II staff

### Career path rewards specialization and expertise

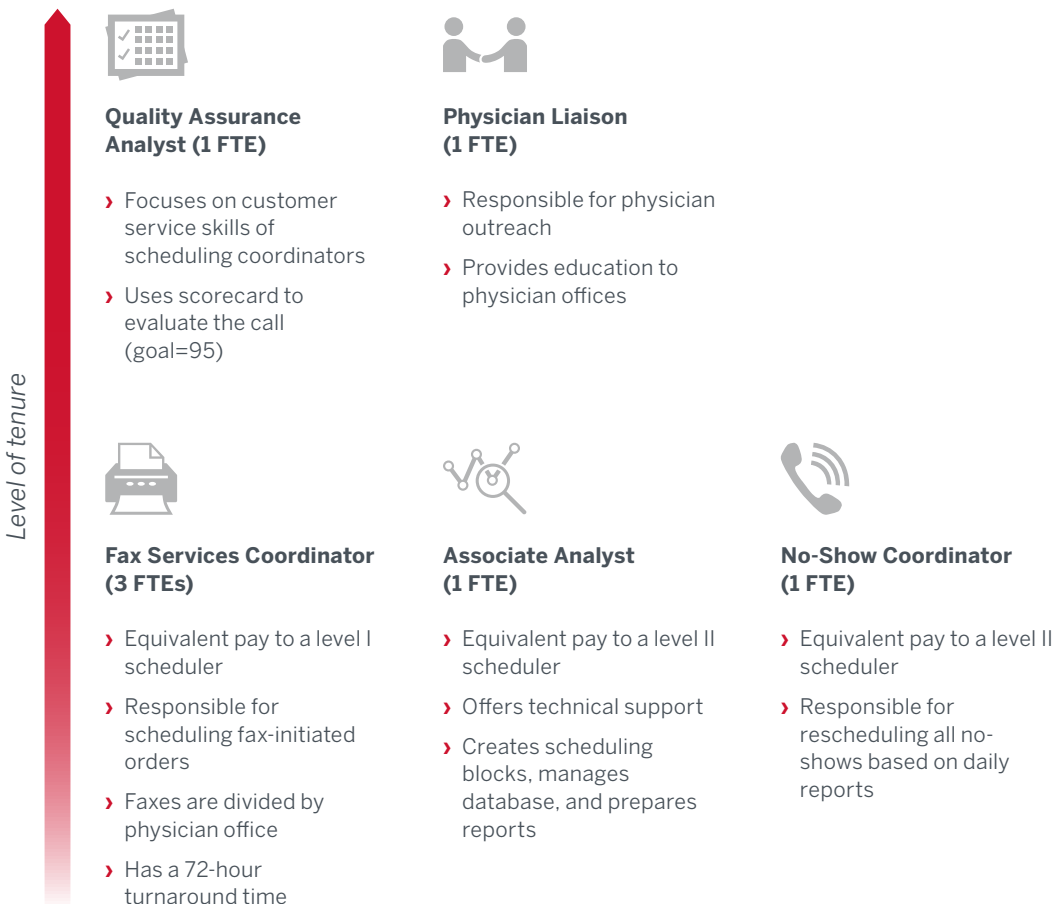


# Train scheduling staff to meet department demands

What started as a four-tier scheduler career path has since evolved to include five additional positions.

The new scheduling opportunities range from a dedicated FTE responsible for rescheduling no-shows based on daily reports, to a quality assurance analyst responsible for helping staff reach performance goals and working in conjunction with the team leads as necessary to train staff

The graphic below shows the different positions and how they relate to one another. The level of tenure and expertise increases from left to right and from bottom to top.



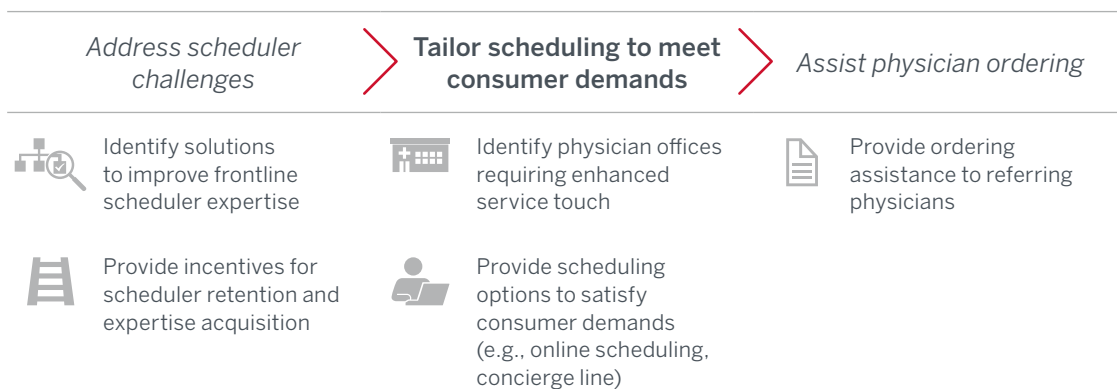
## TACTIC 4

# Tailor **scheduling model** to meet consumer demands

## Move beyond scheduling fundamentals

Once you have built a strong scheduling foundation, the next step is to elevate service through scheduling enhancements for both patients and physicians.

Providers can deliver superior service by understanding consumer preferences and by leveraging technology, such as an online scheduling platform.




## Coordinate patient appointments with clinic visits


UVA Imaging's leadership noticed that many of their patients travelled significant distances to see UVA's physicians and had to wait several days between appointments.


The leadership created a process to identify patients whose imaging was related to a clinic visit and offer to schedule both appointments for the same day.

The technologist flags the completed study so that it is prioritized in the radiologist's queue. The physician receives the preliminary report within a few hours of the exam and prior to the patient's scheduled visit.

**APPROACH 1:**  
COORDINATED  
PATIENT  
APPOINTMENTS

 UVA imaging identified need for **same-day imaging appointment coordination** with clinic visits

 Referrers **notify UVA imaging schedulers** when a patient requires a coordinated appointment

 Program initially piloted for **referring specialists**

 Today **50% of UVA imaging's patients** have coordinated clinic visits

### The day of the coordinated clinic visit

**1**

Patient receives imaging exam and is offered complimentary transportation to next appointment

**2**

Technologist flags the patient's scan as a same-day clinic visit

**3**

UVA Imaging typically sends preliminary reports to clinics within a two-hour turnaround time

## Elevate access for multiple physician offices

Some imaging providers have found success in the market by offering concierge scheduling services to select referring physician offices.

There are three primary models: the group concierge model, the office-specific concierge model, and the embedded imaging concierge model.

The group concierge model consists of a set number of an institution's most qualified schedulers that are available to all referring physicians when coordinated, or expedited care is required.

Office-specific concierge models provide specific referring offices with a direct line to one scheduler who is responsible for scheduling all of that offices exams. This model is popular with organizations with employed physicians, and staff are typically required to schedule patients wherever the physician suggests.

The embedded imaging concierge model takes the office-specific model one step further and physically places an experienced scheduler in the physician's office. This tactic is especially valuable for physicians ordering a high volume of complex exams.

**APPROACH 2:**  
CONCIERGE  
SCHEDULING  
MODELS

	<b>Group concierge service</b>	<b>Office-specific concierge service</b>	<b>Embedded imaging concierge</b>
Structure	› 15 experienced schedulers who are located in a central office and report to director of imaging	› Each concierge is centrally located and reports to their respective imaging departments	› Concierge is physically located in referring physician's office and reports to Director of Imaging
Goal(s)	› Provide expedited care › Coordinate appointments	› Elevate service to physicians	› Schedule patient at point of service › Elevate service to physicians
Audience	› Available to all referrers	› Available to specific offices	› Available to specific offices
Pros	› Easy to implement › Wide availability	› Cultivates relationships with referring physicians › Provides customized service to referring offices	› Cultivates relationships with referring physicians › Provides customized service to referring offices
Cons	› Lack of personal relationship	› Can be expensive to adopt › Limited availability	› Expensive to adopt › Difficult to scale › Ideal for employed physicians

## Evolve imaging scheduling beyond phone interactions

Some organizations are looking to go beyond phone-based scheduling and take scheduling online. Not only can online scheduling be an enhancement to the patient-facing experience, but online scheduling platforms can also be an excellent way to engage referring physicians.

There are three models for online scheduling—each requiring an increasing degree of investment but resulting in increased functionality and convenience.

**83%**

Of imaging directors interested in offering online scheduling

**38%**

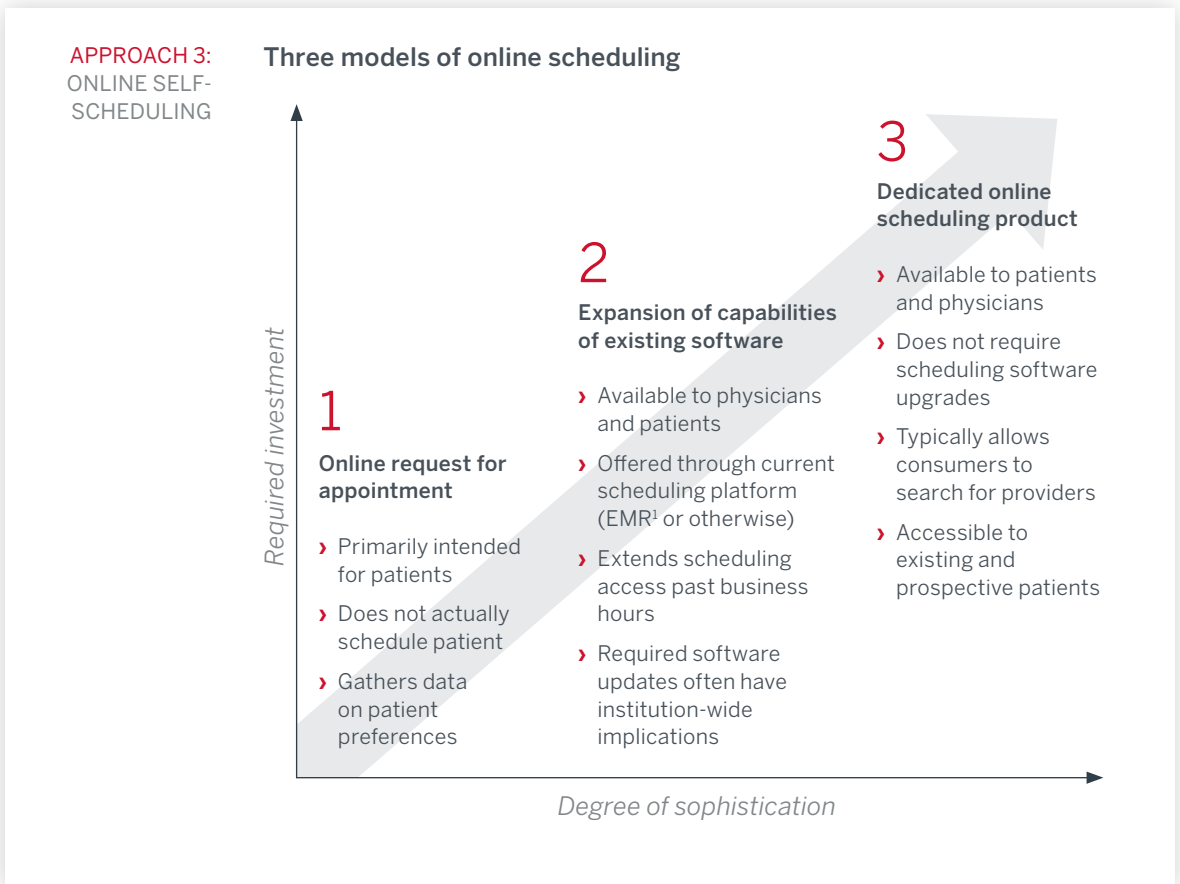
Of imaging providers reported that other departments already offer online scheduling



The first model is the online request for appointment wherein a patient can electronically request an appointment and provide their information and time preferences. This approach is a great way to test the potential appeal of online scheduling in the market.

The next two models of online scheduling are similar in that they both allow patients and physicians to reserve a specific time and date for an exam, but differ in the software used to achieve this goal.

Providers can either use their existing EMR or scheduling software to offer online scheduling or purchase a dedicated third-party solution.



1) Electronic medical record.

## Offer online scheduling convenience to consumers

Although it has its limitations, the online request for appointment model can be an effective way to test out the level of demand for online scheduling.

### Implementing effective requests for appointments

Collects all information necessary to acquire preauthorization if needed for the exam

Includes detailed instructions and outline of how the online request process works

Patient information	Insurance information	Scheduling information <i>By checking the box below, you have read and understood the email confirmation process regarding your web scheduling request.</i>
Name: _____ DOB: _____ Phone: _____ Email: _____ Best time to contact: _____	Self-pay Insured Name of insurance: _____ ID number: _____ Group number: _____ Secondary insurance: _____	Patient order: Y/N Name of referring physician: _____ Exam type: _____ Prior images: Y/N 1st date preference: _____ 2nd date preference: _____ 1st time preference: _____ 2nd time preference: _____

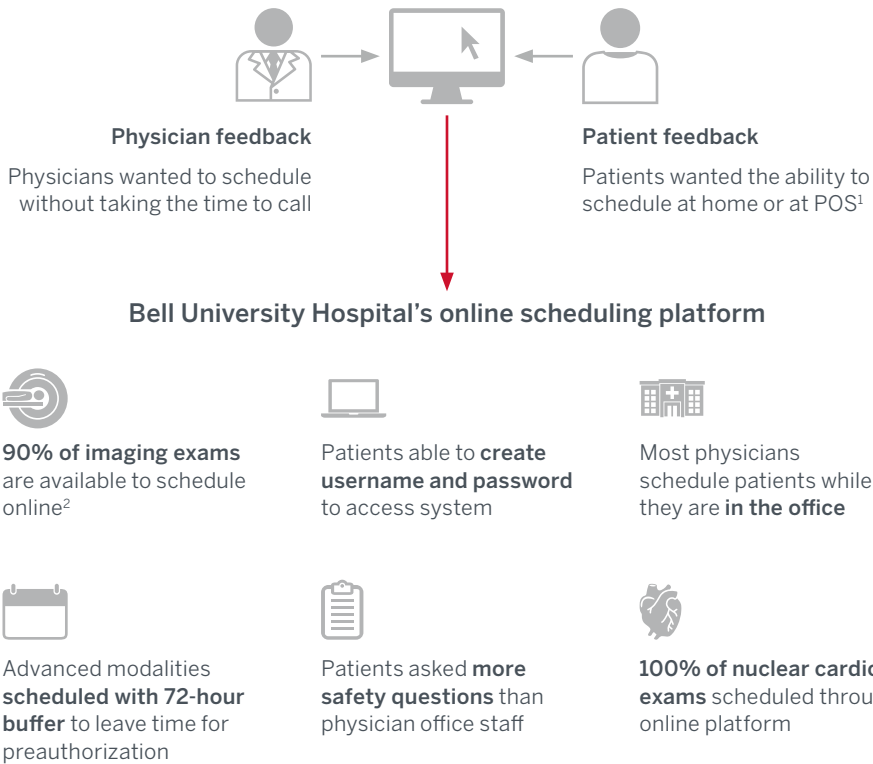
Allows for multiple time and date choices to try to accommodate patient preferences given lack of instant feedback

## Expanding current software's capabilities

Bell University Hospital, a pseudonym, chose to provide physicians and patients with online self-scheduling through an upgrade of their existing scheduling platform.

This update made 90% of Bell's imaging exams available to both physicians and patients through two different portals. Now, patients can create a login to view their portal, but Bell University Hospital controls access to the physician portal.

The majority of Bell's online appointments are placed by referring physicians who prefer the portal to the call center.



## Online imaging scheduling pilot leads to huge gains

The last model is online scheduling through a third-party vendor. Lestrade Health System, a pseudonym, was able to significantly expand its market share by using a dedicated scheduling platform called HealthPost.

Imaging was selected as the pilot site due to its structured scheduling process and standardized slot times and the fact that imaging exams required minimal integration with physician schedules. The pilot was conducted in modalities not requiring preauthorization before being expanded to all imaging modalities. The key to Lestrade's success was their methodical, staged roll out process across several months. They were able to learn about any operational issues early on, before expanding to more complex services.

1) Point of service.

2) Biopsies and other complex exams excluded over safety concerns.

## Staged roll out maximizes return on investment

	Goal	Characteristics of users to onboard	Service line examples
1-4 MONTHS	Target high opportunity/low resistance service lines for launch	<ul style="list-style-type: none"> <li>› <b>Services where patients seek convenience</b></li> <li>› Minimal capacity constraints or ability to open additional inventory</li> <li>› <b>Structured scheduling processes</b></li> </ul>	<ul style="list-style-type: none"> <li>› <b>Patient-driven imaging (e.g., mammography)</b></li> <li>› Employed PCPs</li> <li>› Patient-driven labs</li> <li>› ED discharge into high-growth services (e.g., orthopedics)</li> </ul>
5-8 MONTHS	Build on momentum of roll out across wider array of specialties and sites	<ul style="list-style-type: none"> <li>› More complex appointment types or schedules with direct physician oversight</li> <li>› Outpatient facilities</li> <li>› <b>Services requiring preauthorization or other eligibility requirements</b></li> </ul>	<ul style="list-style-type: none"> <li>› Consumer-driven specialties (e.g., dermatology)</li> <li>› <b>More complex imaging modalities (e.g. CT, MR)</b></li> <li>› ED/UCC<sup>1</sup> check-in</li> <li>› Outpatient services</li> </ul>
9-12 MONTHS	Complete system-wide deployment building on early ROI <sup>2</sup> and user testimonies	<ul style="list-style-type: none"> <li>› Culturally resistant/initially skeptical physician users</li> <li>› More complex/nuanced appointment types</li> <li>› Non-employed physicians</li> </ul>	<ul style="list-style-type: none"> <li>› More complex specialties (e.g., Cardiology)</li> <li>› Physicians resistant during first phases</li> <li>› Affiliated PCP<sup>3</sup> and specialists (e.g., ACO)</li> </ul>

Since then, the platform has been deployed to over 80 physician offices, and HealthPost was fully integrated into the electronic medical record within a year.

Additionally, Lestrade has realized some significant benefits from using the online platform. Now, 44% of online scheduling patients are new to the Lestrade Health System, resulting in greater market share. Additionally, almost all of the patients using the online scheduling platform were commercially insured, resulting in substantial profit contributions for Lestrade.

**44%**

Of patients new to the health system

**87%**

Of patients with commercial insurance

**38%**

Number of additional zip codes reached beyond normal service area

### Financial impact of online scheduling

**\$1,465**

Average MRI contribution margin per scheduled patient

**\$1,756**

Average CT contribution margin per scheduled patient

1) Urgent care center.  
2) Return on investment.  
3) Primary care physician.



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## Additional resources available with membership



### **Implementation resource: Toolkit for Optimizing Outpatient Access**

This toolkit helps imaging leaders thoughtfully improve patient access by enhancing scheduling processes, implementing online scheduling options, and maximizing overall capacity.



### **Executive briefing: What Really Matters to Your Imaging Patients**

We asked more than 2,000 patients what matters most to understand top imaging center attributes, relative preference, and cohort differences. This briefing highlights the top 10 insights from the Imaging Consumer Preferences Survey.



### **Benchmarks: Imaging Productivity and Efficiency Benchmarks**

Explore the results of our 2017 imaging benchmarking survey to see how your facility performs against a custom cohort based on number of scanners, region, trauma designation or operating hours.

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Page 12, 13: Baptist Health South Florida, Coral Gables, FL.

Page 14, 15: UVA Imaging, Charlottesville, VA.

All pages: Imaging Performance Partnership interviews and analysis.

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the ones that  
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