

# A Strategy for Improved Access to Care

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**Jake Moore, Enterprise Access Manager**



# Agenda

- ◆ **Overview**
- ◆ **Patient Portal Online Scheduling**
- ◆ **Radiology Scheduling Tickets**
- ◆ **'New to Penn' Online Scheduling**
- ◆ **Electronic Waitlist Management**
- ◆ **Summary**

*my*PENNMEDICINE

# University of Pennsylvania Health System



## The University of Pennsylvania Health System includes:

- Six Acute Care Hospitals
- Women's & Babies Hospital, Psych Hospital, Rehab Hospital, Behavior Health Hospital
- 4 Employed Physician Organizations (including a Faculty Practice Plan)
- Primary Care Provider Network
- Over 15 Regionally Distributed Multi-Specialty Facilities
- Over 175 provider locations
- Home Care, Rehabilitation, Hospice and a Nursing Home

Licensed Beds	3,000
Total Employees	37,500
Physicians	5,000
Total Admissions	140,000
Clinical Revenue	~\$7 Billion
Outpatient Visits	5.4 Million
Square Feet	Over 5.5 Million
Research Awards	\$740 Million

# UPHS Acute Care Hospitals

## Hospital of the University of Pennsylvania



Licensed beds: 821  
Admissions: 40,000

## Penn Presbyterian Medical Center



Licensed beds: 331  
Admissions: 14,600

## Lancaster General Hospital



Licensed beds: 630  
Admissions: 36,000

## Pennsylvania Hospital



Licensed beds: 567  
Admissions: 24,000

## The Chester County Hospital



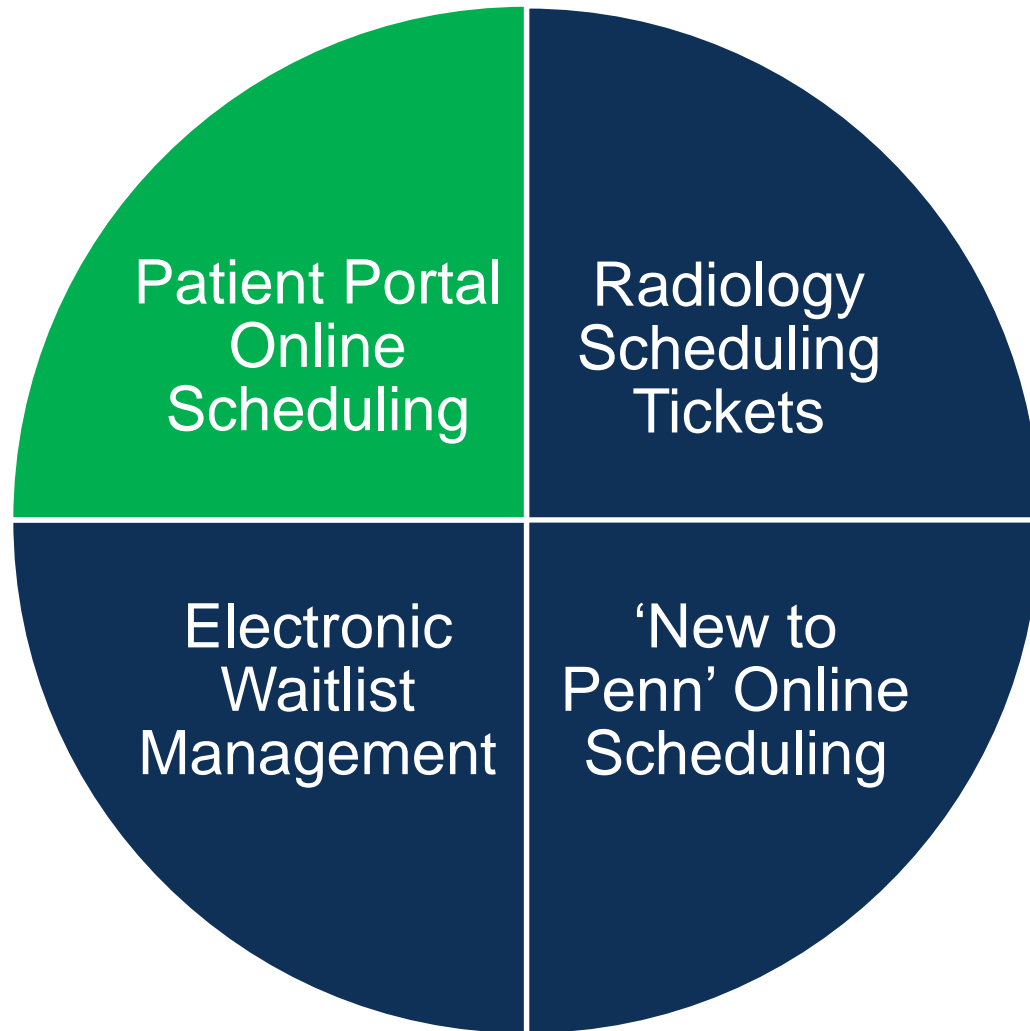
Licensed beds: 277  
Admissions: 15,000

## Princeton Medical Center



Licensed beds: 319  
Admissions: 14,000

# Improving Patient Access



# Patient Portal Online Scheduling

- ◆ Patient portal online scheduling allows patients who have been seen in the health system to schedule a new or return visit with a Penn provider
- ◆ Available for 18 specialties with over 1300 providers
- ◆ Project Duration: 2-3 months per department
- ◆ Scheduled over 170,000 appointments from March 2018-February 2019
- ◆ Created department specific scheduling questionnaires for new patients

	Topic
Week 1	Intro - Kick Off
Week 2	Work Team - Discovery - FAQs - RFV PPT.
Week 3	Work Team - Review basic Visit Types
Week 4	Work Team - Review challenging Provider/Visit Types
Week 5	Confirm Components of Build/Submit for Build
Week 6	Build
Week 7	Build
Week 8	Internal Demo/Test/Fixes
Week 9	Practice Testing
Week 10	Fix Build
Week 11	GO Live

# Departments Live

## Schedule an Appointment

Users needing a more immediate response should please call their doctor's office and leave a message for the nurse.

**For urgent issues, please call 9-1-1 or seek immediate care.**

### Can't find the right specialty?

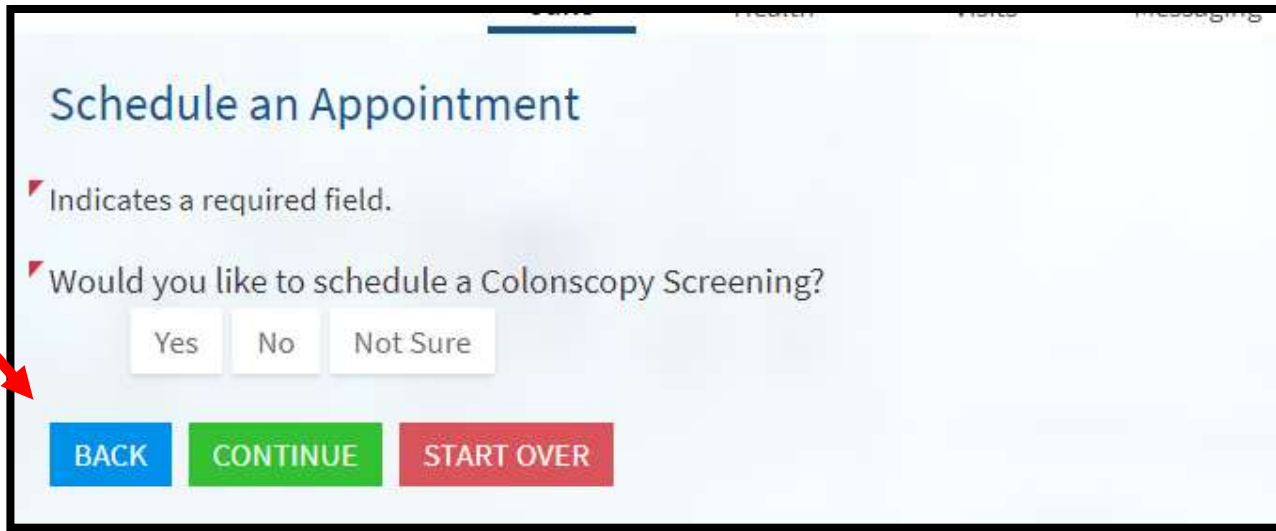
You can also [send an appointment request message](#) for providers that you have seen within the last three years. The practice care team will respond to your appointment request within 2 business days to coordinate a time.

Choose your reason for scheduling an appointment from the options below.

Allergy and Immunology	Bariatric Surgery
Cardiology <i>Returning patients only</i>	Dermatology <i>Returning patients only</i>
Endocrinology, Diabetes, and Metabolism <i>New patients only</i>	Gastroenterology and Liver
Lab Appointment	Nephrology (Renal)
Obstetrics and Gynecology	Ophthalmology <i>Scheie Eye Institute</i>
Oral Maxillofacial Surgery	Orthopaedics
Pain Management <i>Returning patients only</i>	Primary Care
Rehabilitation Medicine	Rheumatology
Sleep Medicine	UPHS Employee FirstCall Virtual Care
UPHS Employee Hypertension Program <i>Penn Medicine employees only</i>	Urgent Care South Philadelphia

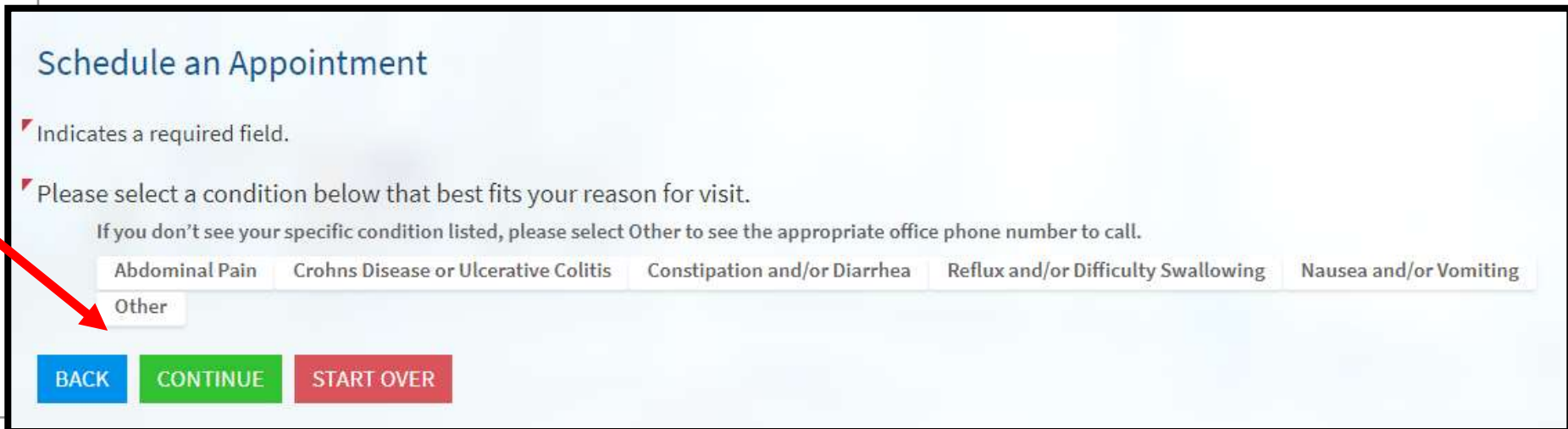


# Patient Scheduling Questionnaire



Schedule an Appointment

- Indicates a required field.
- Would you like to schedule a Colonscopy Screening?



Schedule an Appointment

- Indicates a required field.
- Please select a condition below that best fits your reason for visit.  
If you don't see your specific condition listed, please select Other to see the appropriate office phone number to call.

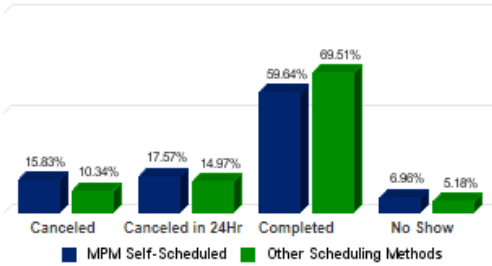


# Scheduling Reporting

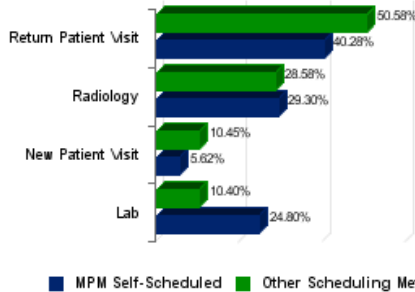
## MyPennMedicine Patient Self-Scheduling Activity Summary Appointments Scheduled for Month of February 2019



### Appointment Outcomes



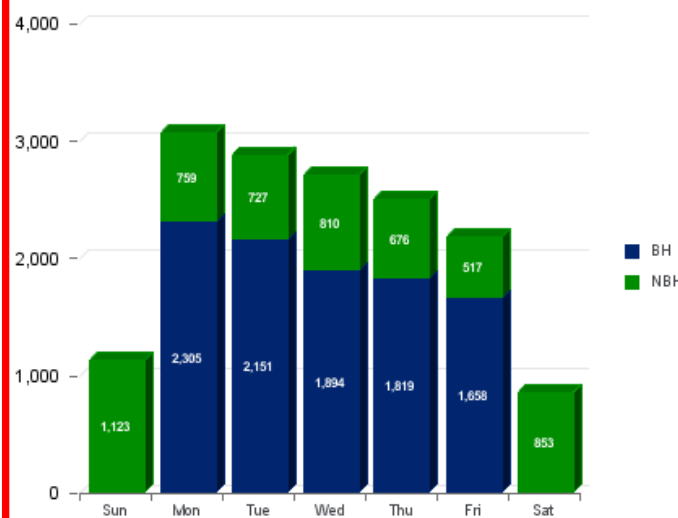
### Visits By Category



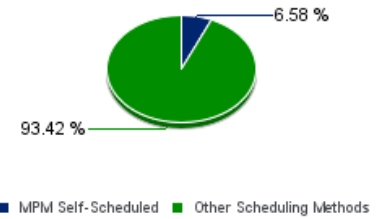
### Top 10 Departments

Department	Count
PATH LAB RADNOR	863
PENN MED LAB AT BUCKS	820
LAB PERELMAN 1ST FLOOR	774
PENNCARE MED ASSOCIATES OF BUCKS	660
RAD HUP PCAM GROUND US	383
SPRUCE INTERNAL MEDICINE PMWS	374
PENN OBGYN AND MIDWIFERY CARE PMWS	349
PATH LAB VALLEY FORGE	327
LABORATORY SERVICES PMCH	278
LAB DRAWSTATION PMWS FLR 8	263

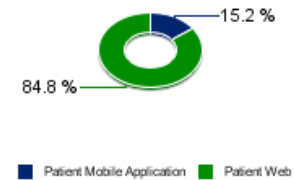
### Appointments Scheduled By Day Of Week



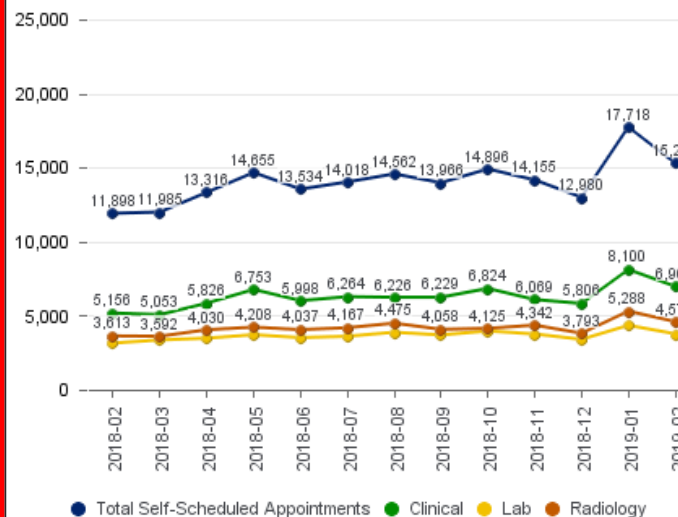
### Appointments Scheduled



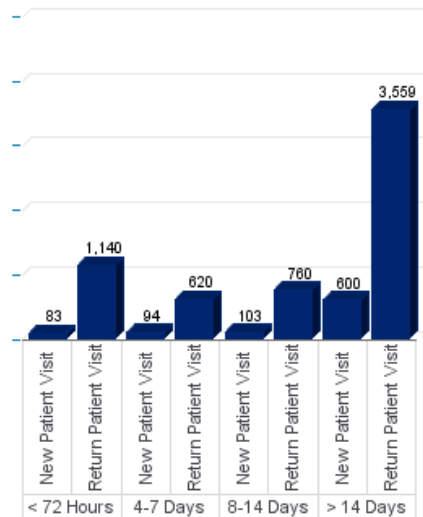
### Appointment Self-Scheduling Methods



### Appointments Scheduled By Month



### Clinical Appointment Lag Breakdown



# Marketing

- ◆ Targeted emails for new departments
- ◆ Education link on completion page of electronic Press Ganey
- ◆ Practice materials such as table tops and business cards

## Penn Medicine Now Offers Online Appointment Scheduling

Did you know that Penn Medicine now offers online appointment scheduling for a number of Penn practices, including Cardiology?

Available through [myPennMedicine](#), this feature gives you the freedom to schedule your next appointment online. It's easy and convenient!

And, remember, myPennMedicine offers other great features including:

- Access to test results
- Prescription refills
- Provider communication

If you've forgotten, we can help you [recover your username](#) or [reset your password](#).

[Learn More About Online Scheduling](#)

ONLINE  
MEDICAL RECORDS



PRESCRIPTIONS  
IN YOUR INBOX



SECURITY



COMMUNICATION



# Lessons learned

- ◆ **Developed kick out questions to screen out patients**
- ◆ **Created logic to automatically send patients to new vs. return workflow based on 3 year history within department**
- ◆ **New patient scheduling questionnaire top 5-10 conditions based off cadence scheduling questionnaires**
- ◆ **Robust testing to ensure accurate scheduling**
- ◆ **Updated center names to practice addresses for location selection starting with city**

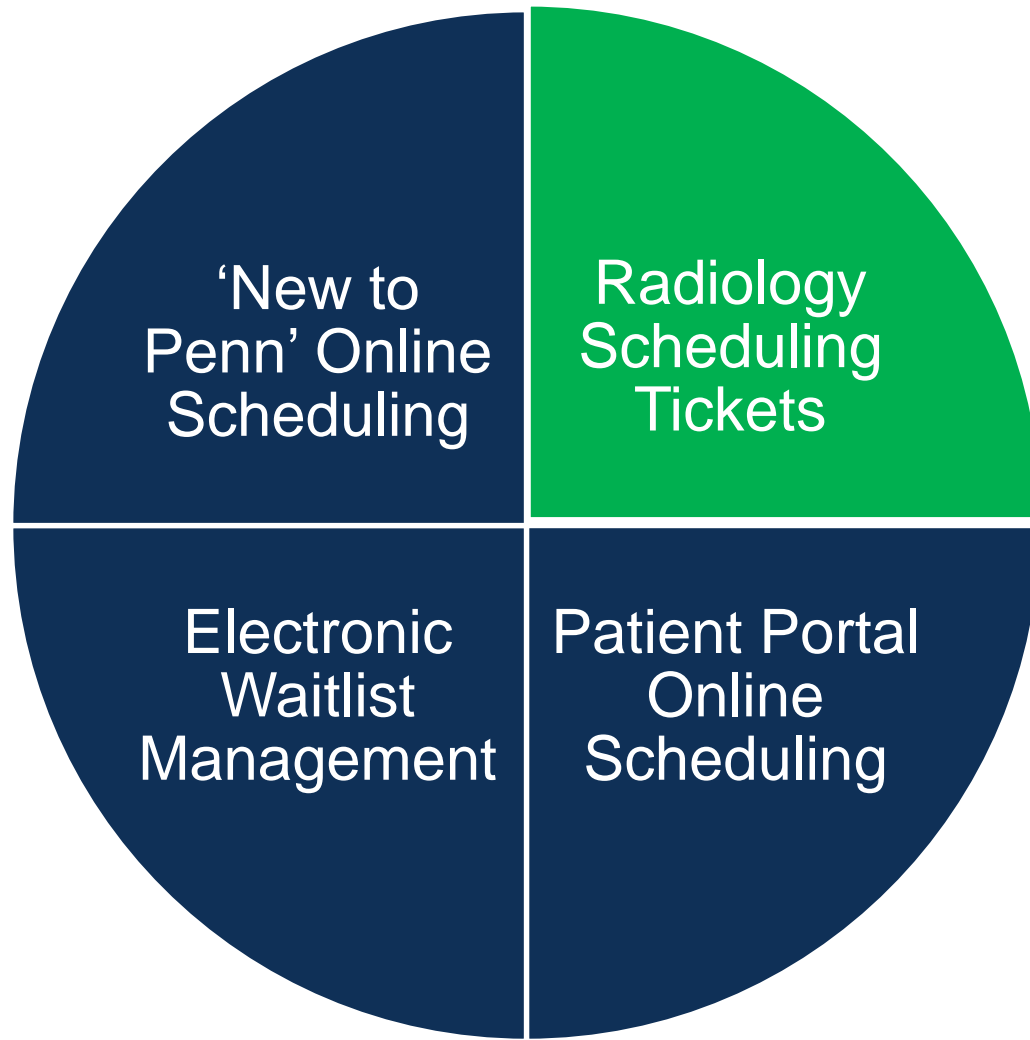


A screenshot of a digital interface for scheduling. The title is "Where do you want to schedule?". Below the title are four selectable options, each in a light blue box with a small red square icon to the left of the text:

- Cherry Hill, NJ - 1865 Marlton Pike East - PENN MEDICINE CHERRY HILL
- Philadelphia, PA 3400 Civic Center Blvd. - PERELMAN CENTER
- Philadelphia, PA 51 N 39th St. - PRESBYTERIAN MEDICAL CENTER
- Radnor, PA 250 King of Prussia Rd. - RADNOR

At the bottom of the interface are three buttons: a blue "BACK" button, a green "CONTINUE" button, and a red "START OVER" button.

# Improving Patient Access



# Scheduling Tickets – Radiology

## ◆ What is a scheduling ticket?

- A scheduling ticket is message that is sent automatically by an ordering provider through the portal that gives a patient access to self-schedule based off of an order.

## ◆ What radiology modalities are currently live?

- Screening Mammo, CT, MRI, GI/GU, US, and X-Ray

## ◆ Will all radiology orders available for Portal Scheduling tickets?

- Not all radiology orders are schedulable depending on order and scheduling complexity

## ◆ How will a provider or patient know if a radiology order is schedulable through the portal?

- Documentation in both process instructions (provider) and scheduling instructions (patient) will note if schedulable through the portal.

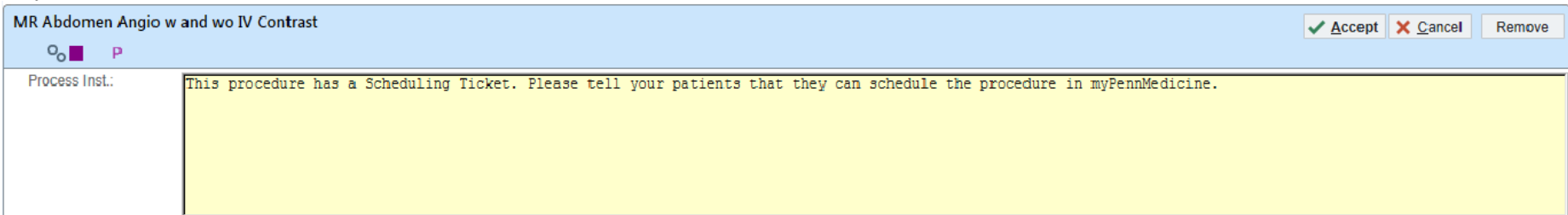
## ◆ Impact to the Providers workflow?

- Absolutely nothing! Providers will continue to use the same ordering workflow and the ticket will be generated and sent automatically to the patient.

# Portal Process Instructions (Provider View)

*When a provider orders a radiology study that is schedulable in the portal, process instructions will be displayed automatically.*

## ◆ Provider View:



The screenshot shows a software window titled "MR Abdomen Angio w and wo IV Contrast". The window has a light blue header bar with three buttons on the right: "Accept" (with a green checkmark), "Cancel" (with a red X), and "Remove". Below the header, there is a label "Process Inst:" on the left and a large yellow text area on the right. The text in the yellow area reads: "This procedure has a Scheduling Ticket. Please tell your patients that they can schedule the procedure in myPennMedicine."

# Portal Order Requisition (Patient View)

Page 1 of 1

FERN HILL  
915 Old Fern Hill Rd  
Bldg D Suite 400  
West Chester, PA 19380-3420  
Phone: 610-738-2556 Fax: 610-738-2666

## IMAGING

### Patient Information

Patient Name	Sex	DOB
Testendo, Bala (641628631)	Female	12/1/1973

### Patient Demographics

Address	Phone	E-mail Address
45 Oak PHILADELPHIA PA 19104	999-333-7878 (Home)	none@none.com

### PCP

## Scheduling Instructions

You have a Scheduling Ticket for this order. When you visit [mypennmedicine.org](http://mypennmedicine.org) to schedule your MRI you will find the Scheduling Ticket option under the Appointments tab at the top of the page.

To allow time for us to obtain insurance authorization, appointments scheduled through myPennMedicine will not be available within the next 7 days. If your study is of a more urgent nature, please call 267-758-4800 to schedule.

# Scheduling Ticket Scheduling Questionnaire

- ◆ Custom scheduling questionnaires per modality to filter out inappropriate patients
- ◆ Questions based off scheduling questionnaires used by scheduling staff
- ◆ Certain questions route to specific locations

Indicates a required field.

Do you have a tissue expander, such as a breast tissue expander?  
 Yes  No

Do you have a pacemaker or defibrillator?  
 Yes  No

Do you have an implantable port that needs access for this MRI?  
 Yes  No

Have you had an injury to the eye involving a metallic object or fragment?  
Examples: metallic slivers, shavings, foreign body  
 Yes  No

Do you have any metal in the body from injury, surgery, or otherwise?  
Examples: joint replacements, screws, rods, plates, bullet fragments, BBs, scrap metals, etc.  
 Yes  No

Do you have a surgical implant or electronic device in your body?  
Examples: stimulators, aneurysm clips, pumps, etc.  
 Yes  No

What is your weight? Please indicate in pounds.

Have you ever had any reaction to an injected contrast agent used for an MRI?  
 Yes  No

[BACK](#) [CONTINUE](#) [START OVER](#)

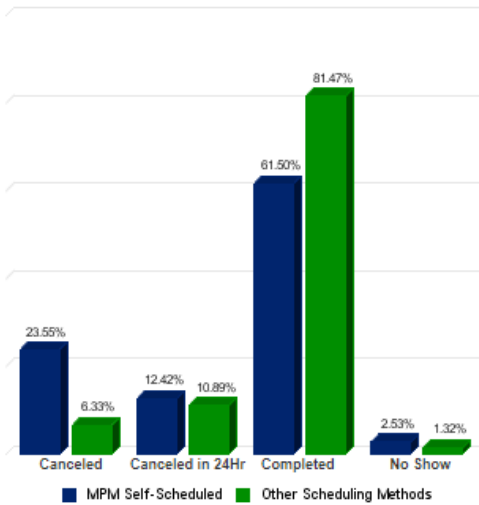


# Radiology Dashboard

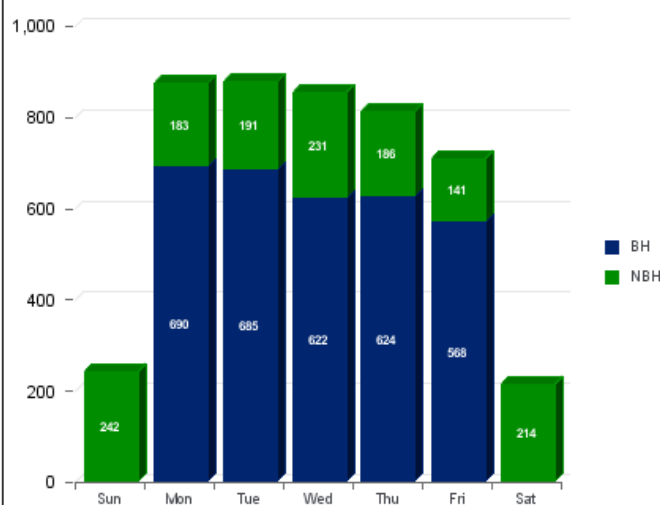
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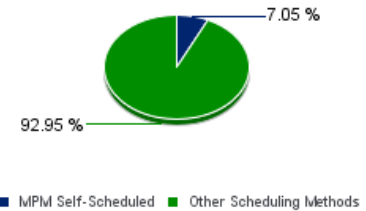
### Appointment Outcomes



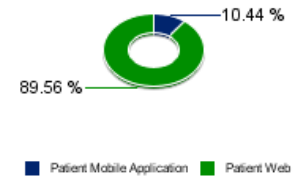
### Appointments Scheduled By Day Of Week



### Appointments Scheduled



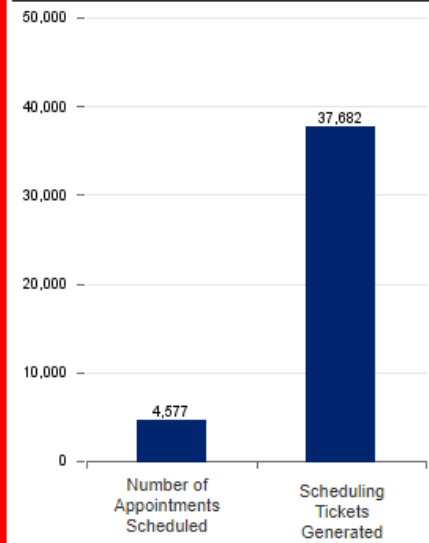
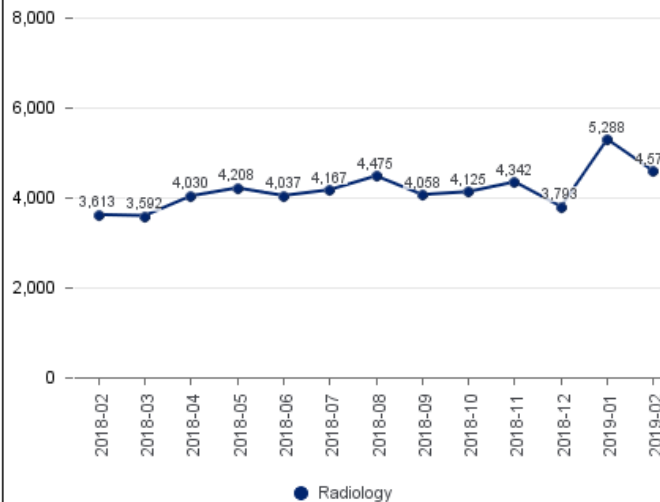
### Appointment Self-Scheduling Methods



### Top 10 Departments

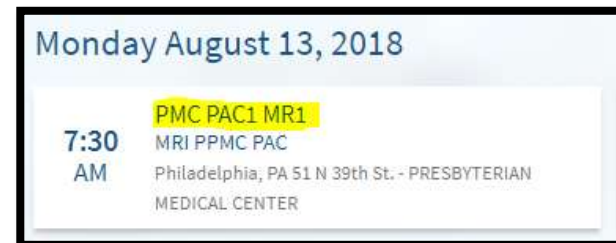
Department	Count
RAD HUP PCAM GROUND US	383
RAD PAH CATHCART 2 MAMMO	245
RAD HUP PCAM GROUND MAMMO	243
RAD PAH CATHCART 2 US	234
RAD HUP PCAM GROUND XRAY	198
RAD HUP PCAM GROUND MRI	194
RAD DCR RADNOR US	169
RAD DCR RADNOR MAMMO	159
RAD HUP PCAM GROUND CT	149
RAD PPMC PMUC 7TH FL XRAY	104

### Appointments Scheduled By Month

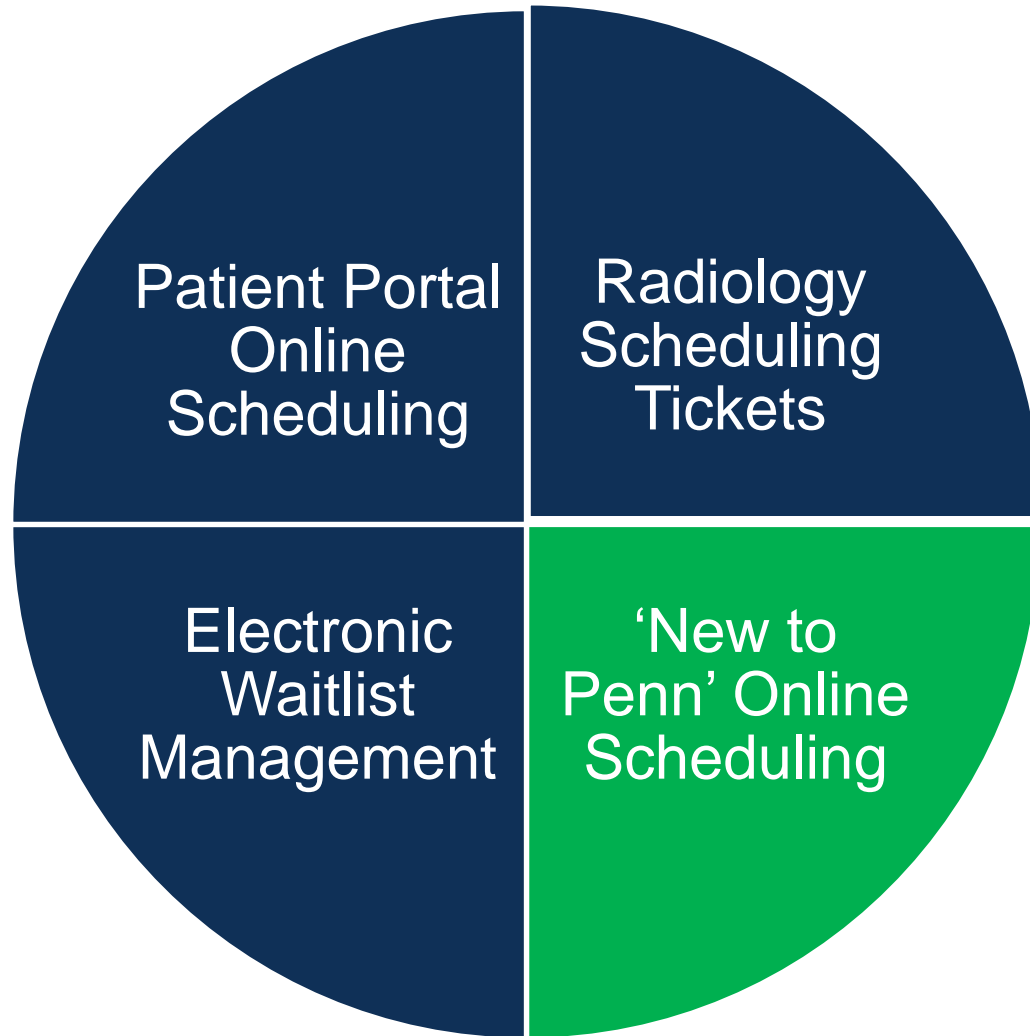


# Lessons Learned

- ◆ **Create indicators for both patients and providers on scheduling ticket availability**
- ◆ **Review all orders and determine scheduling ticket availability based on scheduling complexity and appropriateness**
- ◆ **Patients with multiple schedulable orders will need to schedule each one individually**
  - Report developed to track multiple orders
- ◆ **Resource name from appointment selection can cause confusion for patients**



# Improving Patient Access



# 'New to Penn' Online Scheduling

- ◆ **'New to Penn' Online Scheduling allows patients to schedule directly through the Find a doc tool on Pennmedicine.org without a medical record.**
- ◆ **Orthopaedics Pilot (go live 12/18/17)**
  - Over 50 providers and 10 locations
- ◆ **Utilized the 'find a doc' subspecialty list to act a scheduling questionnaire**
- ◆ **Website development to link pennmedicine.org to open scheduling**
- ◆ **Live in Urgent Care as of May 2018**

# Patient Scheduling Flow


## 1. Find a Doctor or Practice Location


Are you a referring physician?

Provider Name

Specialty

Subspecialty



 **Dr. John Doe**  
Associate Professor AC  
Specialty: Orthopaedic Surgery  
Program: Joint Replacement Program  
[View Full Profile >](#)

[Schedule Online Now](#)  
(New patient only)

Location:  
Penn Medicine Cherry Hill  
Penn Medicine University City

## 2.

**Log in to myPennMedicine**

[LOG IN](#)

[Forgot username?](#) [Forgot password?](#)

**Continue as a Guest**

Not a myPennMedicine user? We'll need to collect more information about you or the patient you're scheduling for.

[BACK](#) [CONTINUE](#)

# Patient Scheduling Flow

**Patient Information** Indicates a required field.

<input type="text" value="First Name"/>	<input type="text" value="Address"/>
<input type="text" value="Middle Name"/>	<input type="text" value=""/>
<input type="text" value="Last Name"/>	<input type="text" value="City"/>
<input type="text" value="Date of Birth"/>	<input type="text" value="State"/>
<input type="text" value="Sex"/>	<input type="text" value="ZIP Code"/>
<input type="radio" value="Male"/> Male <input type="radio" value="Female"/> Female	<input type="text" value="Country"/>
<input type="text" value="Email"/>	<input type="text" value="Social Security number"/>
<input type="text" value="Home Phone"/>	
<input type="text" value="Mobile Phone"/>	

[BACK](#) [NEXT](#)


**Insurance Information**

UNITED HEALTHCARE

1232

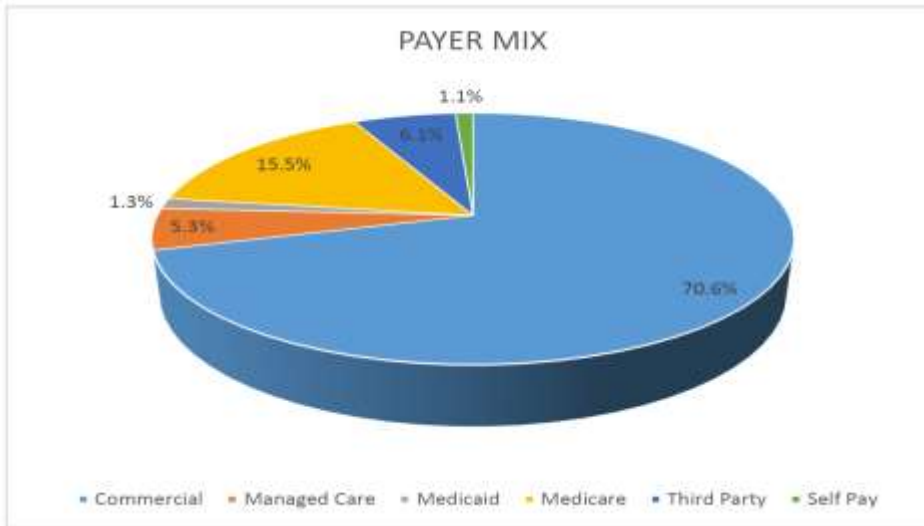
**Verification**

As a spam prevention measure, complete the CAPTCHA below.

I'm not a robot 

[BACK](#) [SCHEDULE IT!](#)

# Orthopaedics Service Line Pilot Data



**11 % New to Penn**

**74 % New to Service Line**

**32% Scheduled Complex Imaging**

**24% 30 days Surgical Yield (sports/ adult reconstruction)**

## Great Notes from Patients

After 2 years of treatment, continuing to have issues, I am looking for a 2nd opinion. Left foot, morton neuromas and other issues, cannot get disc of most recent xrays

Stress fracture in 18 yr old male distance runner. DEXA scan shows osteopenia, blood work shows vit D deficiency & low Testosterone.

I believe I've been living with carpal tunnel in both hands. I have numbness and tingling in my ring, middle, and index fingers after using my hands for more than 5 minutes. I have hardly any hand strength and have quite a bit of pain



# Where would 'New to Penn' Scheduling be successful?

**Departments with access/capacity**



**Providers looking to build patient panel**



**Simplified, single diagnosis scheduling**



**Dedicated staff resource**



# Lessons Learned

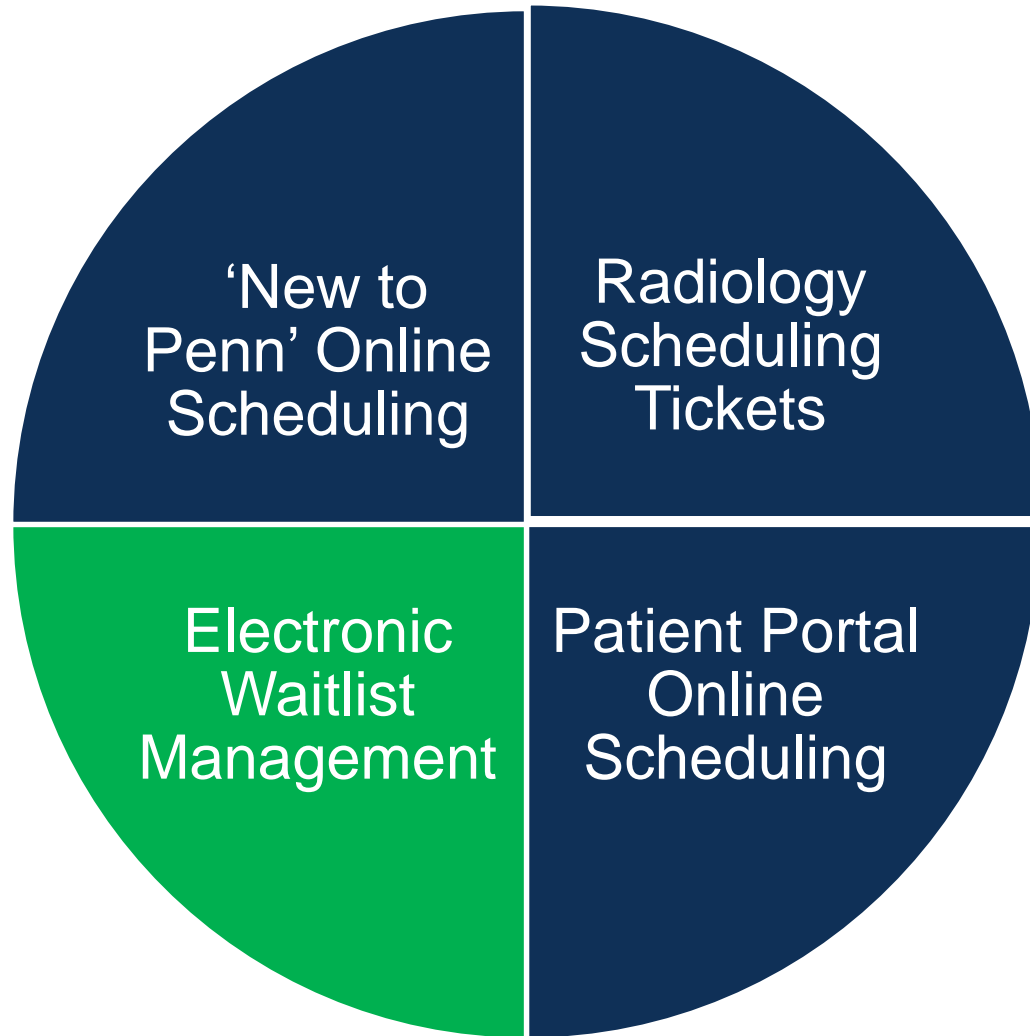
## ◆ What worked well?

- High scheduling volume with no marketing
- Ease of patient scheduling
- Detailed patient comments about visit
- Practice buy-in
  - Dedicated resource to call

## ◆ Project challenges

- Manual practice intervention
  - Must reach out to large majority of patients that schedule to confirm info
- Limited scheduling rules
  - No scheduling questionnaire
  - Return patient scheduling
  - No electronic cancellation option for non-portal schedulers
- Duplicate records created
- Lack of demographic standards when creating a new patient record

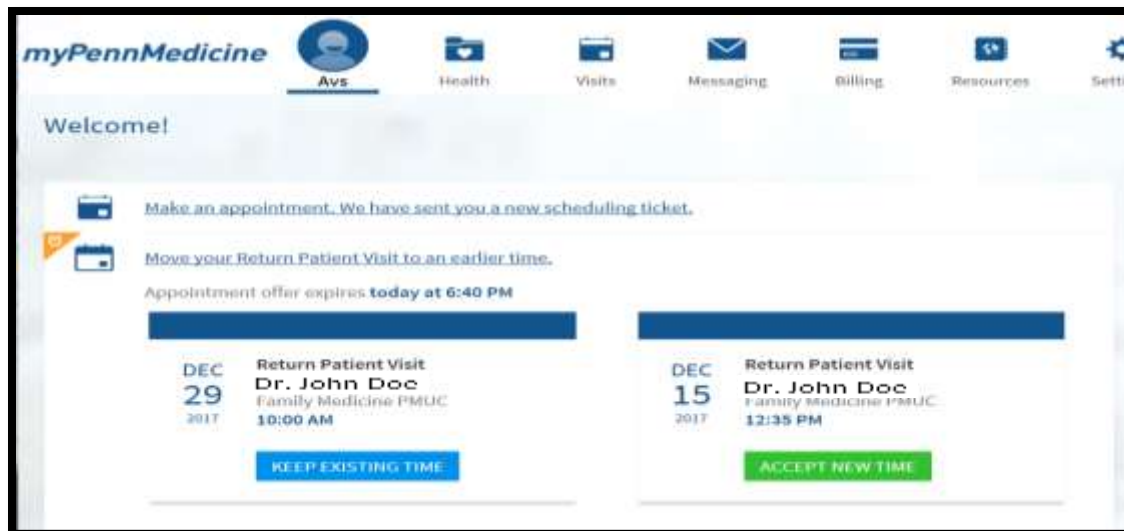
# Improving Patient Access



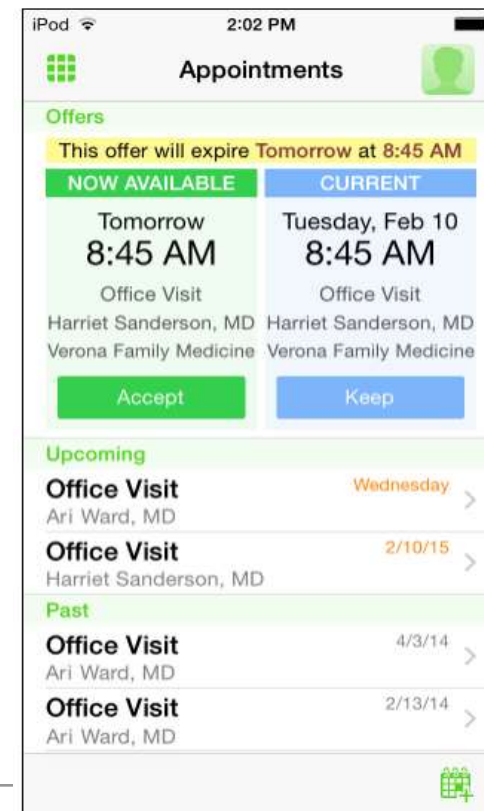
# Electronic Waitlist Management

- ◆ Electronic wait list is a feature that automatically sends patients a tickler e-mail to notify them of a wait list appointment offering. Patients can then log in to the portal and claim the offer if it is still available or decline it to keep the original appointment and wait for another offer.
- ◆ Go Live January 22<sup>nd</sup>
  - Pilot in 2 primary care sites (Family Med at PMUC and West Chester)
- ◆ April 16<sup>th</sup>: Expanded to all 33 Primary Care sites
- ◆ Offer open from 6pm to 7am the next morning

## PC View



## Mobile App View



# Electronic Wait List (cont.)

## ◆ Findings as of 3/1:

- Total of 23,720 offers sent:
  - 1,693 accepted
  - 4,286 declined
- Acceptance/Engagement Rate:
  - ~7% Acceptance Rate (consistent w/ community avg.)
  - ~25% Engagement Rate
- Patient mix of accepted appointments:
  - 34% NPV and 64% RPV
- Average improvement of appt. in days:
  - 30.3 days, max improvement 315 days
- Staff add to wait list vs. patient
  - 97% staff, 3% patients

## ◆ Completion status of accepted appointments:

- Completed: 74%
- Still Scheduled: 5%
- Canceled: 16%
- No Show: 5% (38 NPV, 54 RPV)

# Electronic Wait List Rollout Timeline

- ◆ Projecting departments in red will not be able to go live with electronic waitlist due to complex scheduling/coordinated appointments

Department	FY18						FY19										
	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun
Primary Care																	
Renal																	
Rheumatology																	
Ophthalmology																	
Allergy																	
Rehab																	
Sleep Medicine																	
Urology																	
<b>Neurosciences</b>																	
Neurology																	
Neurosurgery																	
Diabetes																	
Endocrine																	
Otorhinolaryngology																	
GI-Medicine																	
Orthopaedics																	
Pain Management																	
<b>OBGYN</b>																	
Cardiology																	
Gi Surgery																	
Plastic Surgery																	
OMFS																	
Infectious Disease																	
Dermatology																	
Bariatric Surgery (GI Surg)																	
PBH																	
<b>Lung Center</b>																	
Pulmonary																	
Thoracic Surgery																	
Pulm Lab																	
<b>HVC</b>																	
Cardiac Surgery																	
CR Surgery																	
Vascular Surgery																	
Cardio/Vascular Lab																	
<b>Cancer Center</b>																	
Hematology Oncology																	
Radiation Oncology																	
Surgical Oncology																	
Orthopedic Oncology																	
PPMC Hematology Oncology																	

**DRAFT**

# Lessons Learned

- ◆ **Pilot with more practices**
- ◆ **Patient adding themselves is optional at the epic department level**
- ◆ **Engage your call center/scheduling staff staff**
- ◆ **Rely on your staff to add appropriate patients to wait list**
- ◆ **Department-wide implementations to allow for cross-location options**

Move your New Patient Visit to an earlier time.

Appointment offer expires **today at 10:39 PM**

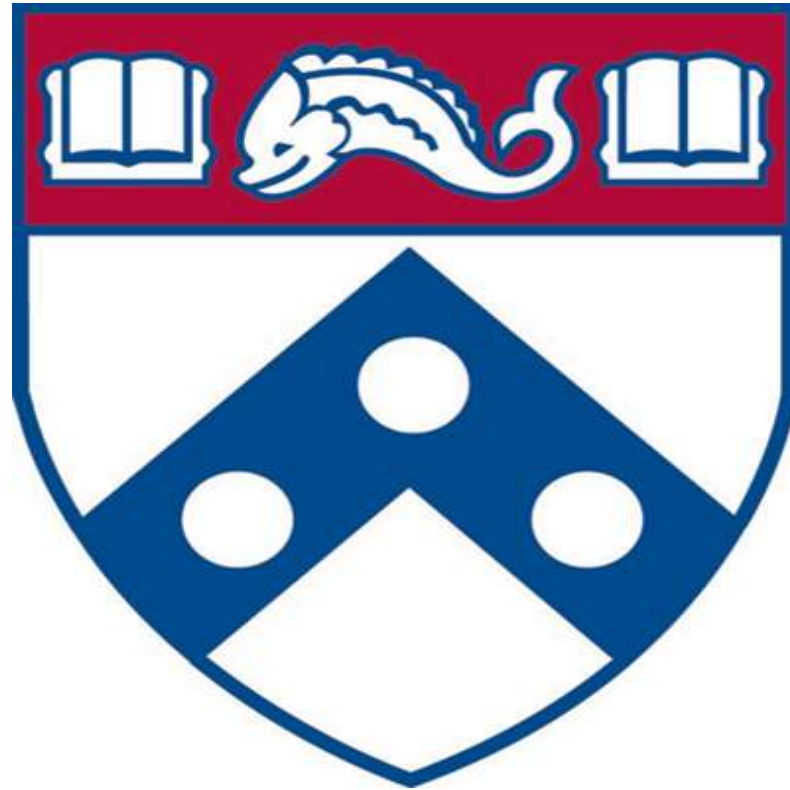
Current Appointment	New Appointment
<b>AUG 29</b> 2018	<b>AUG 8</b> 2018
<b>New Patient Visit</b> <b>Dr. Tom Lica</b> Penn Eye Care at Perelman	<b>New Patient Visit</b> <b>Dr. Tom Lica</b> Penn Eye Care at Perelman
<b>2:30 PM</b>	<b>1:00 PM</b>
<b>KEEP EXISTING TIME</b>	<b>ACCEPT NEW TIME</b>

# Summary

- ◆ **Patient Portal Online Scheduling**
  - Existing patients of Penn Medicine
- ◆ **Radiology Scheduling Tickets**
  - Radiology Studies
- ◆ **'New to Penn' Online Scheduling**
  - Patients who are new to Penn
- ◆ **Electronic Waitlist Management**

*myPennMedicine*

# Questions?





# Contact Information

- ◆ Jake Moore, [Jake.moore@pennmedicine.upenn.edu](mailto:Jake.moore@pennmedicine.upenn.edu)