

# Room Utilization in Lightning Bolt

Boston Children's Hospital | PerfectServe

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perfect**serve** SUMMIT

# Speaker



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*Started 2017*

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***Boston Children's Hospital***

Division of Adolescent and Young Adult Medicine

# Introduction



- Lightning Bolt user since 2018
- Full adoption in 2025
- Department of Pediatrics
  - 19 specialty outpatient programs
  - 1000+ providers
  - 4 Boston locations
  - 6 Satellite locations

# Agenda

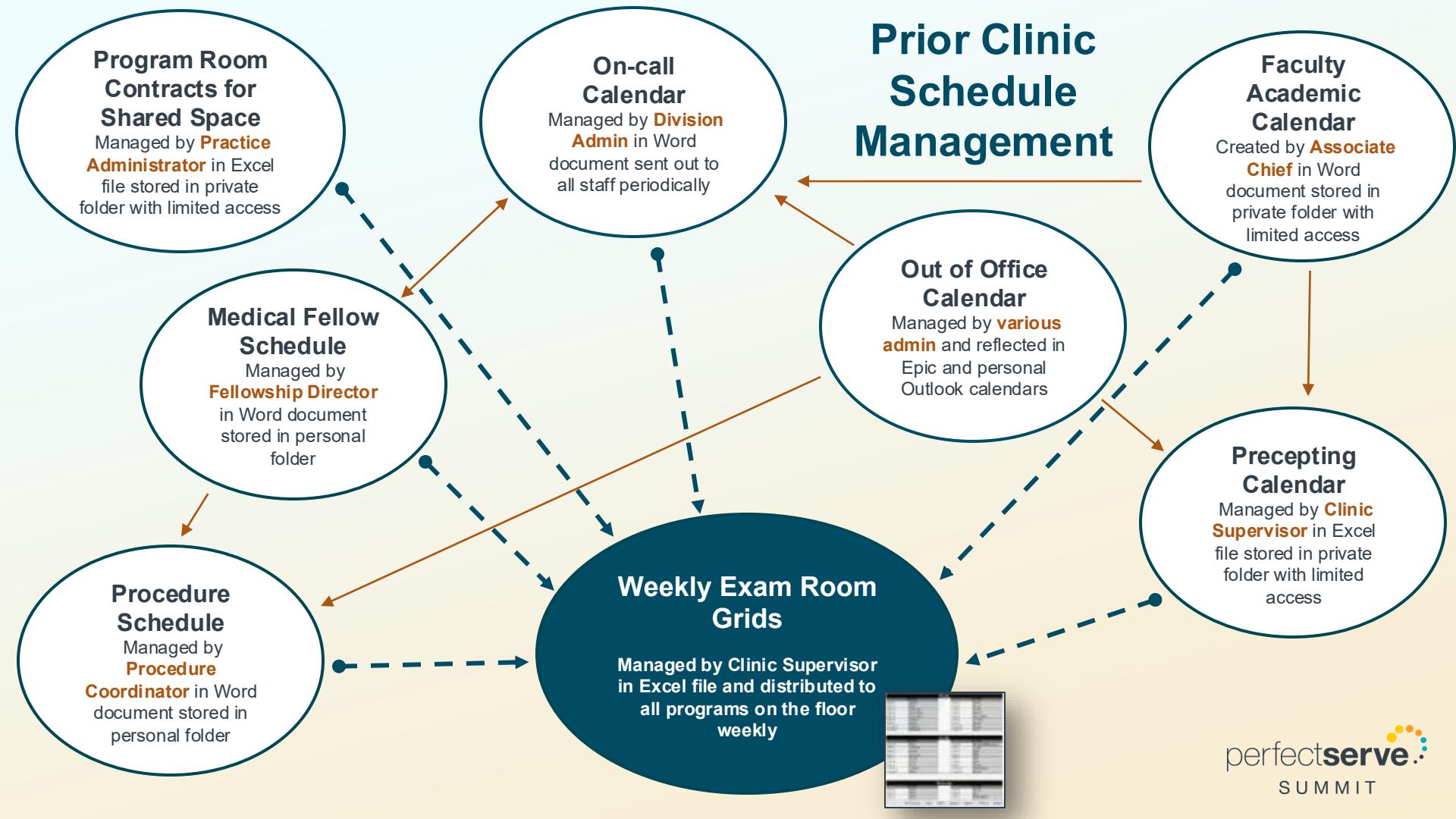
Project Goals

Project Scope & Demo

Value to Boston Children's

Lessons Learned

# Prior Clinic Schedule Management



# Prior Room Scheduling Method

## 1. Lack of visibility:

- Shared spaces unable to see available space outside of home departments

## 2. Challenging to schedule ad hoc visits

- Difficult for providers to add ad hoc visits; crucial as some clinics move away from annual session commitments to annual completed encounter targets.

## 3. Cumbersome room request process

- Convoluted room requesting processes in shared spaces
- Required multiple email touchpoints between room stewards and providers

Monday		Monday AM:	Rooms:
AM Clinic	PM Clinic	OPEN	0
Exam 1	Boone	ROOMS IN USE	9
Exam 2	Boone	Consult room	2
Exam 3	Rodan		
Exam 4	Marvel		
Exam 5	Omorodion		
Exam 6	Gottlieb		
Exam 7	Waxler		
Consult 1	Collamer		
Consult 2	Hollander		
Tuesday		Tuesday AM:	Rooms:
AM Clinic	PM Clinic	OPEN	0
Exam 1	Mochida/Massingham	ROOMS IN USE	9
Exam 2	Rodan	Consult room	0
Exam 3	Miller		
Exam 4	Miller		
Exam 5	Lyon		
Exam 6	Lyon		
Exam 7	Peters		
Consult 1	Massingham		
Consult 2	Clarke		
Wednesday		Wednesday AM:	Rooms:
AM Clinic	PM Clinic	OPEN	7
Exam 1	Bhatia	ROOMS IN USE	2
Exam 2	Cox	Consult room	0
Exam 3	Massingham		
Exam 4	Collamer		

< > BP Summary Data Week 1 Week 2 Week 3 Week 4 Week 5 Providers Virtual Satellites

# Project Goals

	<b>Goal</b>	<b>Purpose</b>
1	<b>Maximize visibility and utilization of clinic exam space.</b>	<ul style="list-style-type: none"><li>• Improve room utilization and visibility across the enterprise</li><li>• <b>Reduce appointment access barriers</b></li><li>• Improve provider experience</li><li>• Increase volume</li></ul>
2	<b>Onboard and optimize all schedules into Lightning Bolt.</b>	<ul style="list-style-type: none"><li>• Centralize schedules, maximizing visibility</li><li>• Capture clinic operational nuances</li><li>• Provide accurate session tracking</li><li>• Act as source of truth for Epic template management</li><li>• Standardize structure for out of office workflows</li></ul>
3	<b>Encourage end user adoption of Lightning Bolt.</b>	<ul style="list-style-type: none"><li>• Improve operational efficiency by building single source of truth</li><li>• Improve provider autonomy of their own schedules</li></ul>
4	<b>Expand existing utilization of Lightning Bolt integrations:</b> <ul style="list-style-type: none"><li>○ WebEx (Spok) - phase 1</li><li>○ Epic Cadence - phase 1</li><li>○ Outlook - phase 2</li><li>○ UKG Dimensions - phase 2</li></ul>	<ul style="list-style-type: none"><li>• Eliminate duplicative data entry, reduce potential for human error</li><li>• Support opening Cadence templates at least 1 year in advance</li><li>• Ease schedule visibility for providers</li><li>• Integrate payroll system to simplify time-off request workflow</li></ul>

# Value to Boston Children's

## Improved Resource Management

- ✓ Accurate session counts to ensure clinical commitments are met.
- ✓ Trend identification to maximize utilization of rooms across the Department of Pediatrics.

## Streamlined Workflows

- ✓ Single source of truth for call, clinic, rooms, and time off improves operational workflows.
- ✓ Integrations with Spok, Cadence, and Outlook drive efficiency and reduce errors.

# Project Scope

3 phases | Jan 7 – July 1, 2025

Onboard & Optimize  
All Divisions

**1015 providers**

**19 divisions with 7 new to  
Lightning Bolt**

- Addiction Medicine
- Dermatology
- Developmental Medicine
- Endocrine
- Hematology
- Nephrology
- PEHC

Room Configuration

**181 Boston exam rooms**

Data collection and  
configuration of rooms

Identification and training of  
room stewards

Process and job aid creation

Reporting & Integrations

**Reports:**

- Clinical Commitment variance
- Session counts
- Available/unassigned rooms

**Integrations:**

- Single Sign On
- Cadence
- Spok
- Outlook

# Walkthrough

# Schedule Views

Room Assignments with Personnel

Full Schedule with Rooms

Unassigned/Available Rooms

Room Reservations View

# Room Assignments with Personnel

08/25/25 - 08/31/25		< >	DOP - 2BP-07		FILTER PERSONNEL	FILTER ASSIGNMENTS	SAVED FILTERS
ASSIGNMENT	Mo 08/25	Tu 08/26	We 08/27	Th 08/28	Fr 08/29		
2BP7 EX01 AM	Genetics (Available)	Michl, Emma	Genetics (Available)	Vu, Victoria	Brucker, William		
2BP7 EX02 AM	Marvel, Marissa	Kritzer, Amy	Genetics (Available)	Murray, Brittany	Peters, Melinda		
2BP7 EX03 AM	Bodamer, Olaf	Brucker, William	Genetics (Available)	NBS Add-Ons	Picker, Jonathan		
2BP7 EX04 AM	Michl, Emma	Goodlet, Benjamin	Reagan, Caitlin	Goodlet, Benjamin	Picker, Jonathan		
2BP7 EX05 AM	Genetics (Available)	Sacharow, Stephanie	Reagan, Caitlin	Michl, Emma	Picker, Jonathan		
2BP7 EX06 AM	Genetics (Available)	NBS Add-Ons	Angevine, Mary	Vu, Victoria	Lyon-Feeney, Helen		
2BP7 EX07 AM	Genetics (Available)	Peters, Melinda	Angevine, Mary	McLellan, Ashley	Lyon-Feeney, Helen		
2BP7 EX08 AM	Dermatology (Available)	Fried, Ari	Tan, Jennifer	Damji, Yasin	Reagan, Caitlin		
2BP7 EX09 AM	Hettenhaus, Katherine	Fried, Ari	Tan, Jennifer	McLellan, Ashley	Reagan, Caitlin		
2BP7 EX10 AM	Hettenhaus, Katherine	Rudders, Susan	Rudders, Susan	Fried, Ari	Banzon, Tina		
2BP7 EX11 AM	Treffiesen, Elsa	Rudders, Susan	Rudders, Susan	Fried, Ari	Banzon, Tina		
2BP7 EX12 AM	Treffiesen, Elsa	Hoytema, Jessica	Voorhees, Sara	Hoytema, Jessica	Chamseddine, Sarah		
2BP7 EX14 AM	Food Challenge	Hoytema, Jessica	Food Challenge	Hoytema, Jessica	Food Challenge		
2BP7 EX15 AM	Food Challenge	OIT	Food Challenge	OIT	Food Challenge		
2BP7 EX16 AM	Food Challenge	OIT	Food Challenge	OIT	Food Challenge		
2BP7 EX17 AM	Food Challenge	OIT	Food Challenge	OIT	Food Challenge		
2BP7 LASER AM	Laser	Laser	Laser	Laser	Laser		
2BP7 EX19 AM	Dermatology (Available)	Dermatology (Available)	Huang, Jennifer	Damji, Yasin	Chamseddine, Sarah		
			Tan, Jennifer				

# Full Schedule with Rooms

SEPTEMBER 2025		DOP - DERMATOLOGY: FULL SCHEDULE (WITH ROOMS)					
PERSONNEL	SU 08/31	Mo 09/01	Tu 09/02	We 09/03	Th 09/04	Fr 09/05	Sa 09/06
Dermatology (Available)			FEG06 EX01 PM FEG06 EX03 PM		FEG06 EX01 PM	2BP7 EX19 AM 2BP7 EX20 AM 2BP7 EX21 AM 2BP7 EX19 PM 2BP7 EX20 PM 2BP7 EX21 PM	
Dermatology (Fellow)					FEG06 EX01 AM FEG06 EX03 AM FEG06 EX07 AM FEG06 EX08 AM		
Dermatology (Resident)					FEG06 EX05 AM FEG06 EX09 AM		
<b>Dermatology - Attendings</b>							
Corey, Kristen	Attending Call Day Attending Call Night			Vacation (Full Day)	Vacation (Full Day)		
Damji, Yasin				BP Derm Clinic AM 2BP7 EX08 AM 2BP7 EX19 AM BP Derm Clinic PM	BP Derm Clinic AM 2BP7 EX08 AM 2BP7 EX19 AM BP Derm Clinic PM	Bos Derm Clinic AM Attending Call Day FEG06 EX09 AM FEG06 EX11 AM Bos Derm Clinic PM FEG06 EX05 PM FEG06 EX09 PM	
Delano, Sophia			Lex Derm Clinic AM Lex Derm Clinic PM				
Gellis, Stephen			Bos Derm Clinic AM FEG06 EX05 AM FEG06 EX09 AM	Lex Derm Clinic AM	Lex Derm Clinic AM	Lex Derm Clinic AM	
Grenier, Pierre-Olivier			PB Derm Clinic AM PB Derm Clinic PM		BP Laser AM 2BP7 EX20 AM 2BP7 EX21 AM 2BP7 LASER AM	Bos Derm Clinic AM FEG06 EX01 AM FEG06 EX03 AM VAC Clinic PM	

# Unassigned / Available Rooms

09/29/25 - 10/05/25		◀ ▶	DOP - * UNASSIGNED/AVAILABLE ROOMS		⚙ FILTER PERSONNEL	140 ASSIGNMENTS	SAVED FILTERS	<a href="#">+ Add Shift</a>			
PERSONNEL			Mo 09/29	Tu 09/30	We 10/01	Th 10/02	Fr 10/03				
<b>TALLIES</b>											
BOSTON AM			-	-	-	-	-				
FEG 05 AM ROOMS (Total Unassigned/Avail)			1	-	2	5			1		
FEG 06 AM ROOMS (Total Unassigned/Avail)			-	-	-	-			1		
FEG 08 AM ROOMS (Total Unassigned/Avail)			-	-	-	-			-		
FEG 10 AM ROOMS (Total Unassigned/Avail)			-	-	-	-			-		
BOSTON PM			-	-	-	-			-		
FEG 05 PM ROOMS (Total Unassigned/Avail)			-	1	5	6			5		
FEG 06 PM ROOMS (Total Unassigned/Avail)			2	-	1	1			-		
FEG 08 PM ROOMS (Total Unassigned/Avail)			-	-	-	-			-		
FEG 10 PM ROOMS (Total Unassigned/Avail)			-	-	-	-			-		
Dermatology (Available)					FEG06 EX11 PM						
GI (Unassigned)				FEG05 EX02 PM FEG05 EX18 PM	FEG05 EX14 AM FEG05 EX20 AM FEG05 EX08 PM	FEG05 EX03 AM FEG05 EX13 AM FEG05 EX14 AM FEG05 EX15 AM FEG05 EX20 AM FEG05 EX02 PM FEG05 EX03 PM FEG05 EX12 PM			FEG05 EX01 PM FEG05 EX05 PM FEG05 EX06 PM		
Hematology (Available)			FEG06 EX11 PM								
Hematology (Unassigned)			FEG06 EX17 PM					FEG06 EX11 PM			
Renal (Unassigned)			FEG05 EX14 AM		FEG05 EX09 PM FEG05 EX10 PM FEG05 EX11 PM FEG05 EX12 PM	FEG05 EX13 PM FEG05 EX14 PM FEG05 EX15 PM		FEG05 EX19 AM FEG05 EX19 PM FEG05 EX20 PM			
Rheumatology (Available)								FEG06 EX04 AM			

# Rooms Reservation View

September 26, 2025   ROOM RESERVATIONS (AVAILABLE ROOMS) 

 (38 RESULTS)

DATE	LOCATION(S)	ASSIGNMENT	EMAIL
NOW   8:38 AM EDT			
September 26, 2025	Brookline Place	2BP7 EX03 AM	2BP07RoomStewards-dl@childrens.harvard.edu
September 26, 2025	Brookline Place	2BP7 EX04 AM	2BP07RoomStewards-dl@childrens.harvard.edu
September 26, 2025	Brookline Place	2BP7 EX05 AM	2BP07RoomStewards-dl@childrens.harvard.edu
September 26, 2025	Brookline Place	2BP7 EX07 AM	2BP07RoomStewards-dl@childrens.harvard.edu
September 26, 2025	Brookline Place	2BP7 EX19 AM	2BP07RoomStewards-dl@childrens.harvard.edu, FEG06RoomStewards-dl@childrens.harvard.edu
September 26, 2025	Brookline Place	2BP7 EX21 AM	2BP07RoomStewards-dl@childrens.harvard.edu, FEG06RoomStewards-dl@childrens.harvard.edu
September 26, 2025	Brookline Place	2BP7 EX20 AM	2BP07RoomStewards-dl@childrens.harvard.edu, FEG06RoomStewards-dl@childrens.harvard.edu
September 26, 2025	333	333-02 EX02 AM	333LO02RoomStewards-dl@childrens.harvard.edu
September 26, 2025	333	333-02 EX07 AM	333LO02RoomStewards-dl@childrens.harvard.edu
September 26, 2025	333	333-02 EX10 AM	333LO02RoomStewards-dl@childrens.harvard.edu
September 26, 2025	333	333-05 EX04 AM	333LO05RoomStewards-dl@childrens.harvard.edu
September 26, 2025	Fegan	FEG06 EX04 AM	FEG06RoomStewards-dl@childrens.harvard.edu
September 26, 2025	Fegan	FEG06 EX07 AM	2BP07RoomStewards-dl@childrens.harvard.edu, FEG06RoomStewards-dl@childrens.harvard.edu
September 26, 2025	Fegan	FEG10 EX10 AM	FEG08RoomStewards-dl@childrens.harvard.edu, FEG10RoomStewards-dl@childrens.harvard.edu
September 26, 2025	Fegan	FEG10 EX11 AM	FEG08RoomStewards-dl@childrens.harvard.edu, FEG10RoomStewards-dl@childrens.harvard.edu
September 26, 2025	Fegan	FEG10 EX12 AM	FEG08RoomStewards-dl@childrens.harvard.edu, FEG10RoomStewards-dl@childrens.harvard.edu

**SCHEDULED** 

**2BP7 EX20 AM**  
FRI, SEPTEMBER 26, 2025  
8:00 AM - 12:00 PM

**Dermatology(Available)**

Email — [2BP07RoomStewards-dl@childrens.harvard.edu](#), [FEG06RoomStewards-dl@childrens.harvard.edu](#)

**Details**  
Department — BCH Rooms  
Template — 2BP-07  
Location — Brookline Place  
Originally Scheduled — N/A

**History** [view 2 entries](#)  
Last modified — Thu, Aug 7, 2025 1:58 PM  
Last modified by — Pagnozzi, Stephanie



 REMOVE

 REPLACE

 SPLIT SHIFT

 MODIFY DETAILS

perfectserve.<sup>SM</sup>  
SUMMIT

# Reporting

Room Utilization

Session Tracking

Provider Annual Session Variance

- o Admin and End User reports

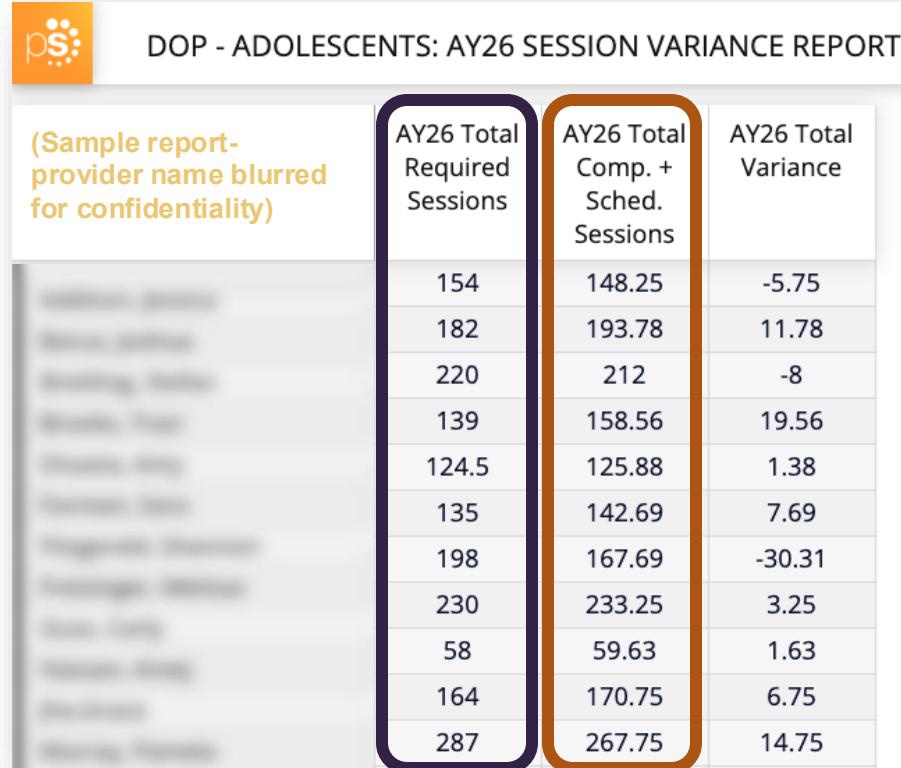
# Room Utilization Report

*BCH EXAM ROOM UTILIZATION REPORT		08/13/2025 - 08/13/2025							
	Adolesc... (Available)	Dermato... (Available)	Develop... Medicine (Unassig...)	Genetics (Available)	GI (Unassig...)	Hematol... (Available)	Pulmon... (Unassig...)	Renal (Unassig...)	Total
2BP-04 AM EXAM ROOMS			10						10
2BP-04 PM EXAM ROOMS			12						12
2BP-07 AM EXAM ROOMS				7					7
2BP-07 PM EXAM ROOMS				2					2
333-05 AM EXAM ROOMS	3								3
333-05 PM EXAM ROOMS	1								1
FEG 05 AM EXAM ROOMS							2		2
FEG 05 PM EXAM ROOMS				1			4		5
FEG 06 AM EXAM ROOMS					1				1
FEG 06 PM EXAM ROOMS		3							3
FEG 08 PM EXAM ROOMS						2			2
FEG 10 AM EXAM ROOMS						1			1
Total	4	3	22	9	1	1	3	6	49

# Session Tracking

	DOP - GENETICS: SESSION COUNTS		08/01/2025 - 08/31/2025								
	Genetics Bos Clinic AM	Genetics Bos Clinic PM	Genetics Lex Clinic AM	Genetics Lex Clinic PM	Genetics Remote AM	Genetics Remote PM	Genetics Wal Clinic AM	Genetics Wal Clinic PM	Genetics Wey Clinic AM	Genetics Wey Clinic PM	
Abu-El-Haija, Aya					7		2				
Bhatia, Neha		3				3					
Bodamer, Olaf	1	1			1	1					
Boone, Philip		1			1						
Brucker, William	9	5			2						
Choi, William		1									
Chopra, Maya		3									
Chung, Wendy	2	2									
Cox, Gerald		2									
Goodlet, Benjamin	7										
Holtz, Alexander							2				
Horlbeck, Max	2										
Irons, Mira		4			4						

# Session Variance – Admin



DOP - ADOLESCENTS: AY26 SESSION VARIANCE REPORT

(Sample report-  
provider name blurred  
for confidentiality)

AY26 Total Required Sessions	AY26 Total Comp. + Sched. Sessions	AY26 Total Variance
154	148.25	-5.75
182	193.78	11.78
220	212	-8
139	158.56	19.56
124.5	125.88	1.38
135	142.69	7.69
198	167.69	-30.31
230	233.25	3.25
58	59.63	1.63
164	170.75	6.75
287	267.75	14.75

## REQUIRED SESSIONS

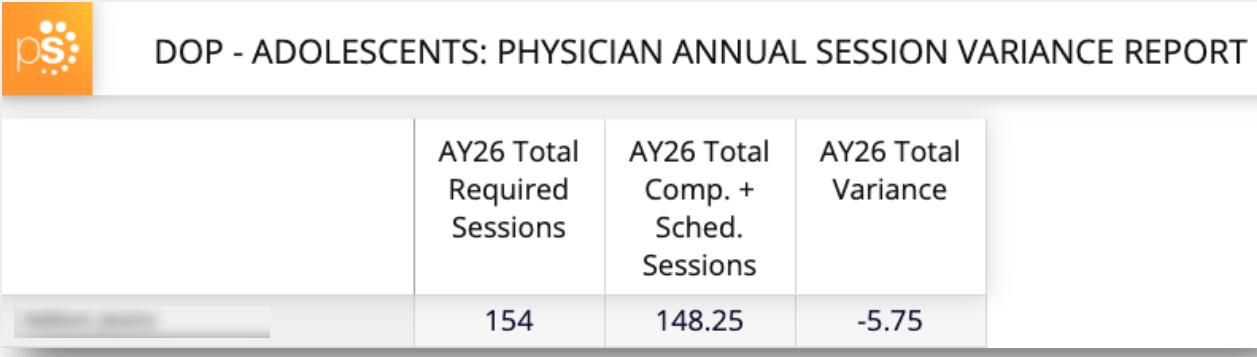
Provider annual session commitments

## COMPLETED & SCHEDULED SESSIONS

Data pulled directly from Lightning Bolt schedules

# Session Variance – End User

*Session variance report with data limited to  
the logged in user*



The screenshot shows a report titled "DOP - ADOLESCENTS: PHYSICIAN ANNUAL SESSION VARIANCE REPORT". The report includes a logo with the letters "ps" and a yellow background. The data is presented in a table with four columns:

	AY26 Total Required Sessions	AY26 Total Comp. + Sched. Sessions	AY26 Total Variance
[Blurred Provider Name]	154	148.25	-5.75

\*Provider name blurred for confidentiality.

# Outcomes

## Improved Available Room Reallocation

- Captures provider out-of-office dates.
- Identifies solutions for restricted room capacity due to extenuating circumstances such as construction.
- Enables providers to identify exam rooms to accommodate urgent patient visits.

## Reduced Scheduling Errors

- Single source of truth for admin management and provider access.
- Elimination of duplicate entry of the on-call schedule in WebEx/Spok.
- Presents opportunity for departments to improve workflows around Epic template creation and management.

## Improved Accuracy

- Session tracking and variance prediction made available to leadership for the first time.
- Allows for the opportunity to allocate rent on shared floors appropriately.

# One Source for All Clinic Schedules

Managed by **Practice**

Admin in Word

file stored

folder with

access

Admin in Word

Management

Created by

Chief in

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cess

ASSIGN.	Mo 09/29	Tu 09/30	We 10/01	Th 10/02	Fr 10/03
<b>BOSTON AM</b>					
Precept Bos AM	O'Brien, Rebecca	Borus, Joshua	Fitzgerald, Shannon	Divasta, Amy Pitts, Sarah	Hassan, Areej
Primary Care AM					
Onsite Boston AM	Breitling, Stefan	Brooks, Traci Fitzgerald, Susan	Breitling, Stefan Jhe, Grace		Woodfield, Michelle Fitzgerald, Susan
Virtual Boston AM	Boonchullier, Lauane	Boonchullier, Lauane Cullity, Lauren	White, Leah	Jhe, Grace	Freizinger, Melissa White, Leah Peters, Darcy
<b>BOSTON PM</b>					
Precept Bos PM	Borus, Joshua	Brooks, Traci	Murray, Pamela	Brooks, Traci	Hassan, Areej
Primary Care PM					Burley, Cassie Melendez Garcia, Carlos
LARC Precept PM			Fitzgerald, Shannon		
IUD PM			Burley, Cassie		
Nexplanon PM					
Onsite Boston PM	Breitling, Stefan Brooks, Traci Jhe, Grace Fitzgerald, Susan	Breitling, Stefan Borus, Joshua Hassan, Areej O'Brien, Rebecca Fitzgerald, Susan	Forman, Sara	Shrier, Lydia Fitzgerald, Susan	Borus, Joshua Fitzgerald, Susan
Virtual Boston PM	Tsappis, Michael Boonchullier, Lauane	Tsappis, Michael Boonchullier, Lauane Cullity, Lauren	Jhe, Grace White, Leah	Freizinger, Melissa Jhe, Grace Tsappis, Michael	Freizinger, Melissa White, Leah Peters, Darcy
<b>ON CALL</b>					
Oncall Attending	Richmond, Tracy	Richmond, Tracy	Richmond, Tracy	Richmond, Tracy	Divasta, Amy Richmond, Tracy
Oncall Fellow	Burley, Cassie	Burley, Cassie	Burley, Cassie	Burley, Cassie Nagle, Shea	Nagle, Shea
<b>OUT OF OFFICE</b>					
Vacation			Awnetwant Esperon, Ester	Forman, Sara O'Brien, Rebecca Awnetwant Esperon, Ester	Fitzgerald, Shannon O'Brien, Rebecca Cullity, Lauren

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# Room Scheduling Today

Monday			
AM Clinic		PM Clinic	
Exam 1	Marvel	Exam 1	Boone
Exam 2	Michl	Exam 2	Boone
Exam 3	O'Donnell	Exam 3	Rodan
Exam 4	Omorodion	Exam 4	Marvel
Exam 5	Omorodion	Exam 5	Omorodion
Exam 6	Gottlieb	Exam 6	Gottlieb
Exam 7	Waxler	Exam 7	Waxler
Consult 1	Collamer	Consult 1	Chung
Consult 2	Hollander	Consult 2	OPEN

Tuesday			
AM Clinic		PM Clinic	
Exam 1	Michl	Exam 1	Mochida/Massingham
Exam 2	Gilmartin	Exam 2	Rodan
Exam 3	Brucker	Exam 3	Miller
Exam 4	Sacharow	Exam 4	Miller
Exam 5	Murray	Exam 5	Lyon
Exam 6	Kritzer	Exam 6	Lyon
Exam 7	Peters	Exam 7	Peters
Consult 1	Collamer	Consult 1	Massingham
Consult 2	OPEN	Consult 2	Clarke

Wednesday			
AM Clinic		PM Clinic	
Exam 1	OPEN	Exam 1	Bhatia
Exam 2	OPEN	Exam 2	Cox
Exam 3	OPEN	Exam 3	Massingham
Consult 1	OPEN	Consult 2	OPEN

< > BP Summary Data Week 1 Week 2 Week 3 Week 4 Week 5

ASSIGN.	Mo 09/29
333-05 EX01 AM	Adolescent (Available)
333-05 EX02 AM	Breitling, Stefan
333-05 EX03 AM	Isolation Room
333-05 EX04 AM	Adolescent (Available)
333-05 EX05 AM	Adolescent (Available)
333-05 EX06 AM	Kang, Augustine
333-05 EX07 AM	Ramirez, Guadalupe
333-05 EX08 AM	Adolescent (Available)
333-05 EX09 AM	Adolescent (Available)
333-05 EX10 AM	PAIN
333-05 EX01 PM	Brooks, Traci
333-05 EX02 PM	Breitling, Stefan
333-05 EX03 PM	Isolation Room
333-05 EX04 PM	Adolescent (Available)
333-05 EX05 PM	Fitzgerald, Susan
333-05 EX06 PM	Martins, Kelly
333-05 EX07 PM	Ramirez, Guadalupe

# Thank you!

