



Workflow Integration: Making PROs Work in Busy Clinical Settings

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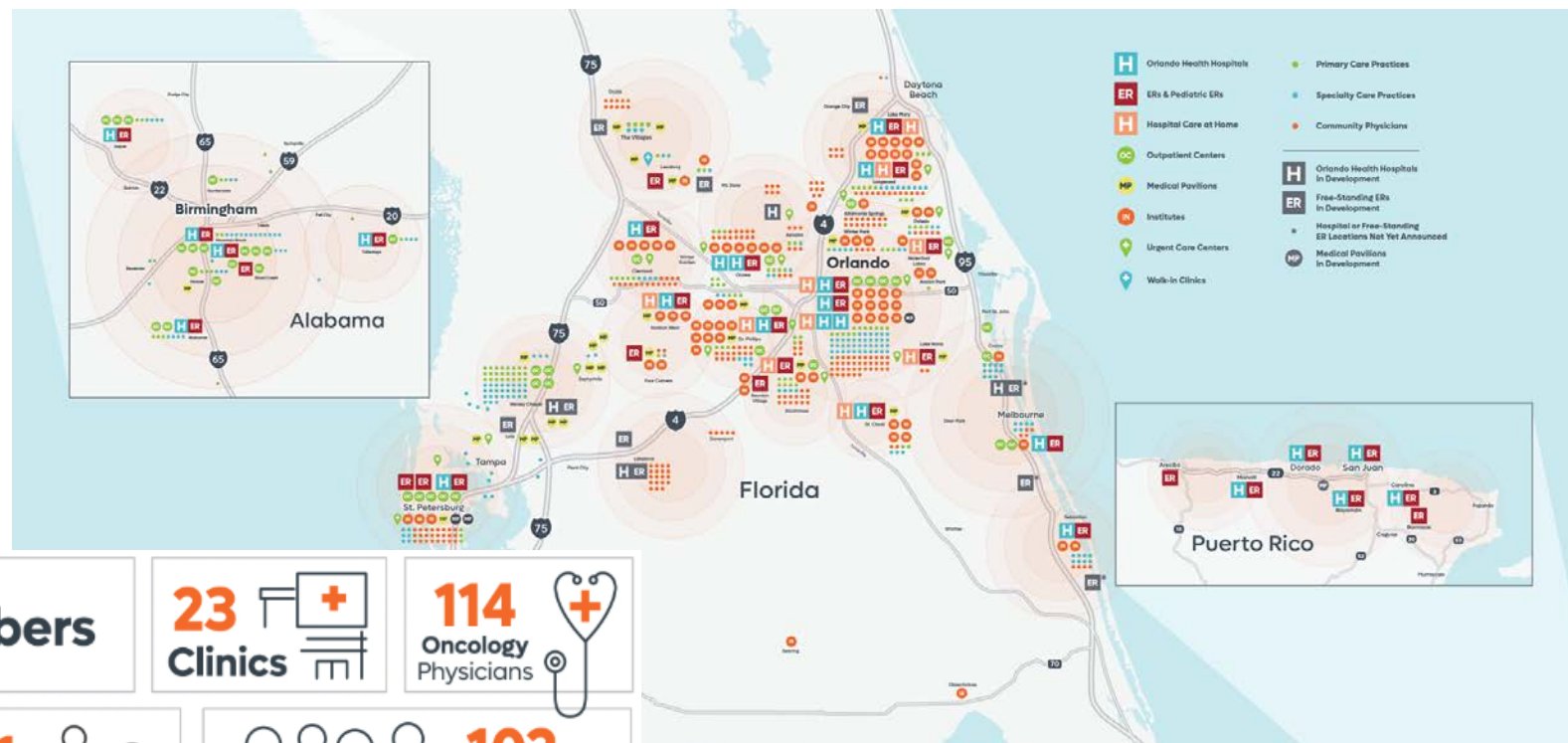
Disclosures

No relevant
financial relationships with ineligible
companies to disclose.

About Us



*Orlando Health
Cancer Institute*
Orlando, FL



 **806** Team Members

23  Clinics

114  Oncology Physicians

207,000  Outpatient Visits

8,911  Inpatient Discharges

 **102** Surgical Advanced Practice Providers

 **1,523** New Oral Chemo Starts

61,581 Total Chemo Administrations

 **2,672** New Chemo Starts

 **14,103** New Patients

Learning Objectives

- 1. Identify organizational and patient KPIs that can be positively impacted by proactive ePRO collection among oncology patients on active anti-cancer therapy.**
- 2. Describe facilitators and barriers to successful eSyM implementation in a community oncology program.**
- 3. Explain how eSyM affects patient engagement with the clinical team and clinical workloads, and identify opportunities for workflow optimization.**

Agenda

01 What is eSyM?

02 Enhancing Oncology Care with eSyM

03 Improving the Patient Experience

04 Lessons & Future Directions



ePROs in Oncology

Electronic patient-reported outcomes (ePRO) demonstrate benefit among those with cancer



Decreased symptom burden



Decreased acute care utilization



Possible improvement in survival

JAMA. 2017;318(2):197-198. doi:[10.1001/jama.2017.7156](https://doi.org/10.1001/jama.2017.7156)
Cancer Med. 2017;6(3):537-546. doi:[10.1002/cam4.1002](https://doi.org/10.1002/cam4.1002)
JCO Clin Cancer Inform. 2020;4:947-957. doi:[10.1200/CCI.20.00081](https://doi.org/10.1200/CCI.20.00081)

What is eSyM?

Symptom Survey

ORLANDO HEALTH MyChart

eSyM Medical Oncology Symptom Monitoring

For the To Do task eSyM Symptom Monitoring

* Indicates a required field.

In the last 24 hours,

* How OFTEN did you have PAIN?

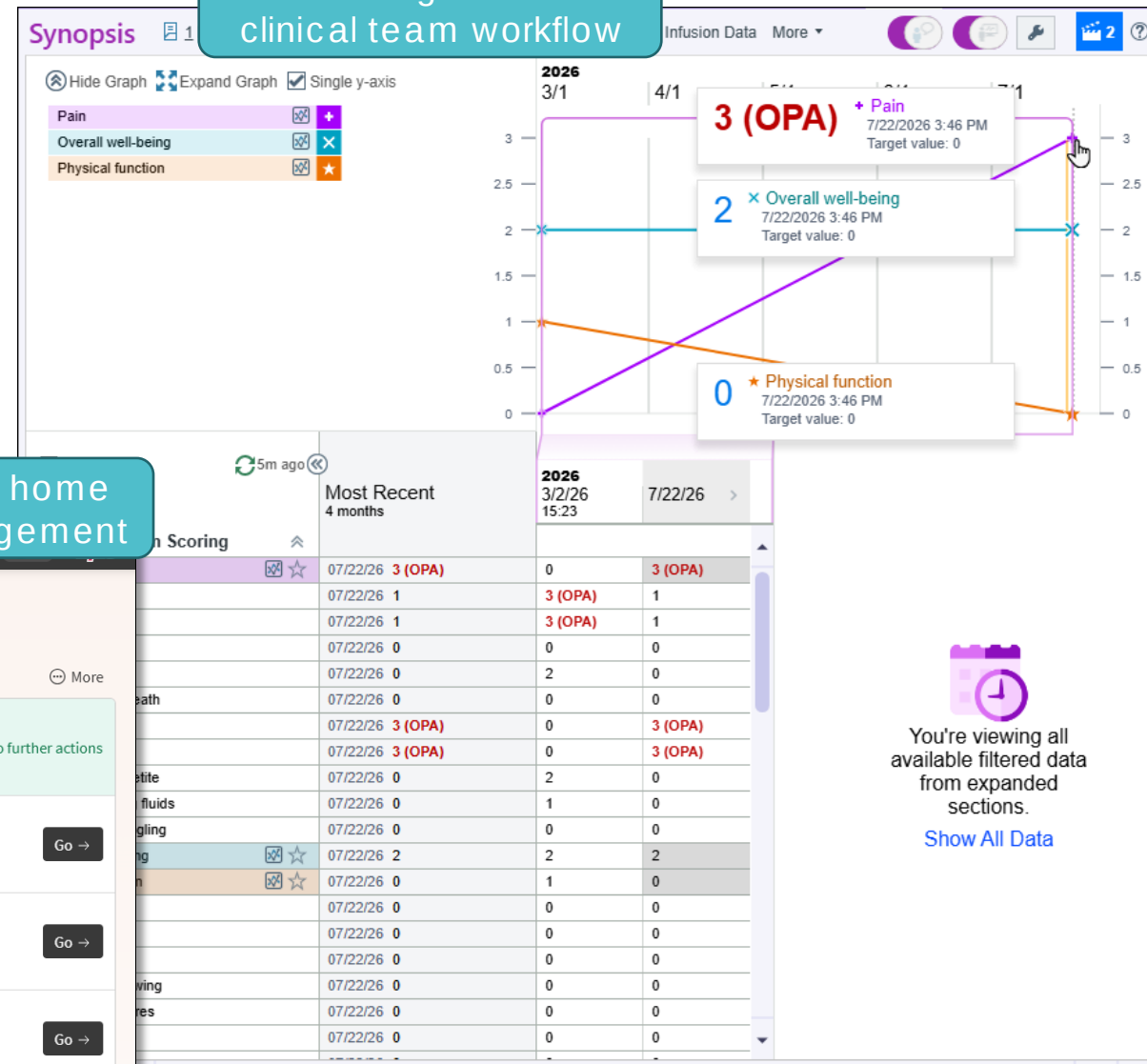
Never Rarely Occasionally **Frequently** Almost constantly

* What was the SEVERITY of your PAIN at its WORST?

None Mild Moderate **Severe** Very severe

Tip sheets for at home Symptom Management

Data integrated into clinical team workflow



You're viewing all available filtered data from expanded sections.

Show All Data

ORLANDO HEALTH MyChart

To Do

Tasks 4

Progress

Changes 3

Manage Reminders

Today's Tasks

20% complete

☒ eSyM Symptom Monitoring By end of day Tell us how you are feeling. Please enter information about the symptoms you are experiencing. Task has no further actions

☐ Tips for managing cancer related pain By end of day One article to read. Go →

☒ eSyM Pain Assessment By end of day Please take a moment to tell us more about your pain. Go →

☐ Tips for managing fatigue By end of day One article to read. Go →



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Expanding suite of supportive care

Goal: Reduce OP35 preventable acute care events due to anti-cancer therapy



APP chemotherapy education

Nurse phone triage

Oral chemotherapy monitoring

Antiemetic consultation

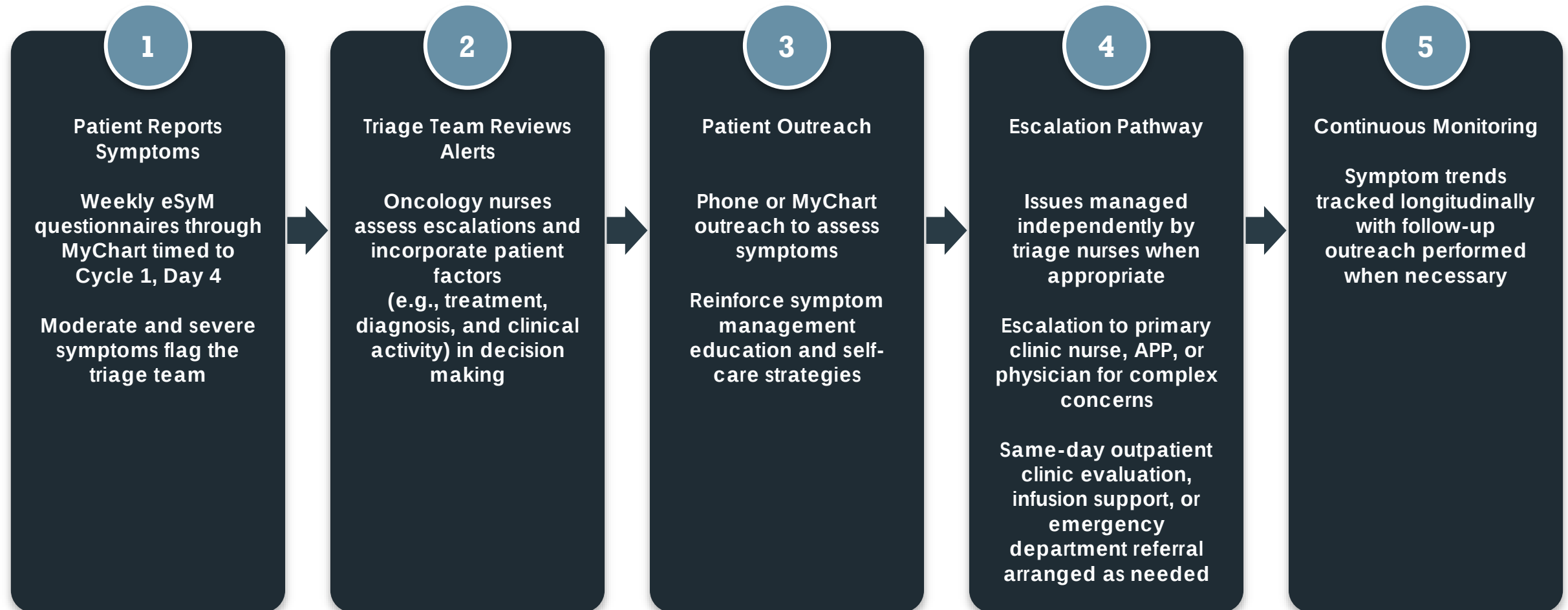
Expanded Palliative Care services

CMS OP-35 data transparency for clinical teams

eSyM Symptom Monitoring

eSyM Workflow

A proactive, patient-initiated cycle for managing symptoms between visits, embedded in existing oncology triage workflows.



eSyM at OHCI

Go-live 6/17/2025

Automated enrollment for patients:

- o Adults 18 years and older
- o English speaking
- o Intravenous/Injection Treatment Plan only
- o Breast, Cutaneous, Gastroenterology, Gynecologic, Head & Neck, Thoracic at our primary downtown campus (N=11 physicians)

1261

Patients enrolled

↓ 38%

Decrease in treatment-related ED visits

5380

Patient reports triaged by nursing

95%

Contacted within 48 hours

Stellar patient engagement

73.8%

of patients completed at least 1 report

~8.6 reports

per engaged patient



+54

Patient Net Promoter Score



Tracking, support, and connection

64.5% with **Moderate** symptoms

17.3% with **Severe** symptoms



#1 Most requested feature by patients

Free text box to describe symptoms in more depth

Impact of eSyM on OP35

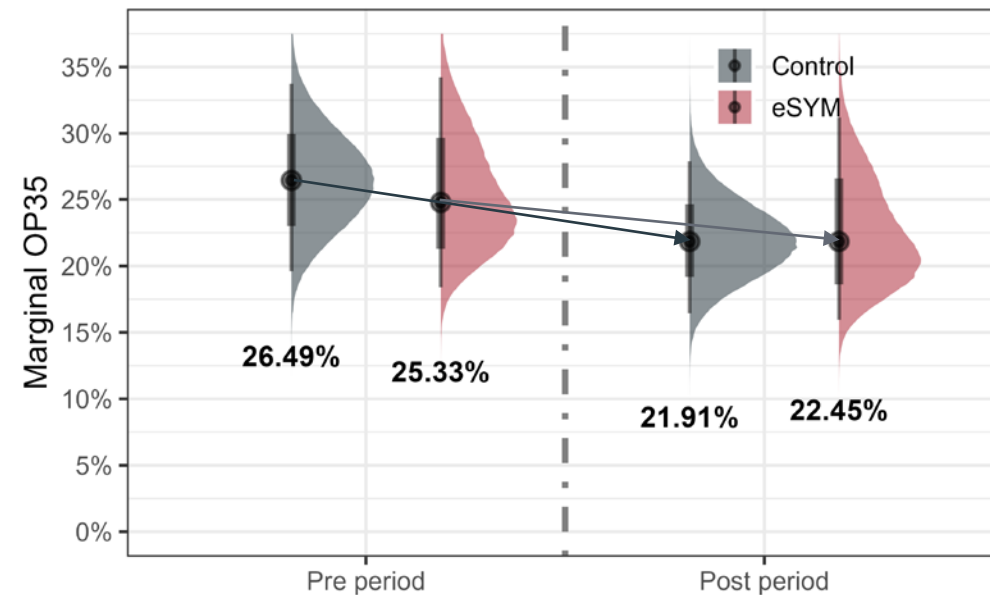
eSyM: Main campus, 11 selected physicians (n=627 pre, n=643 post)

Control: Regional sites, main campus non selected physicians (n=395 pre, n=479 post)

In this intent-to-treat, difference-in-difference analysis:

- No overall effect on OP35 rates
- No impact on OP35 admissions
- High probability of decrease in OP35 ED visits

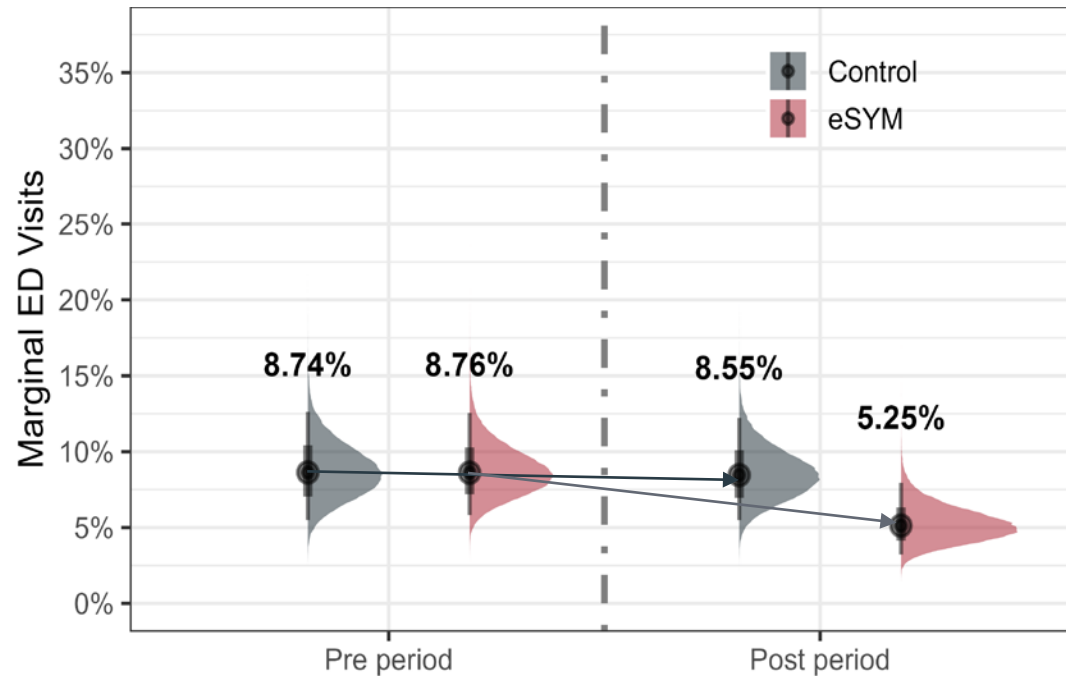
Acute Care Events: +1.67%



DiD 1.67% (5.66-9.28%)
Pr(eSyM)= 0.32

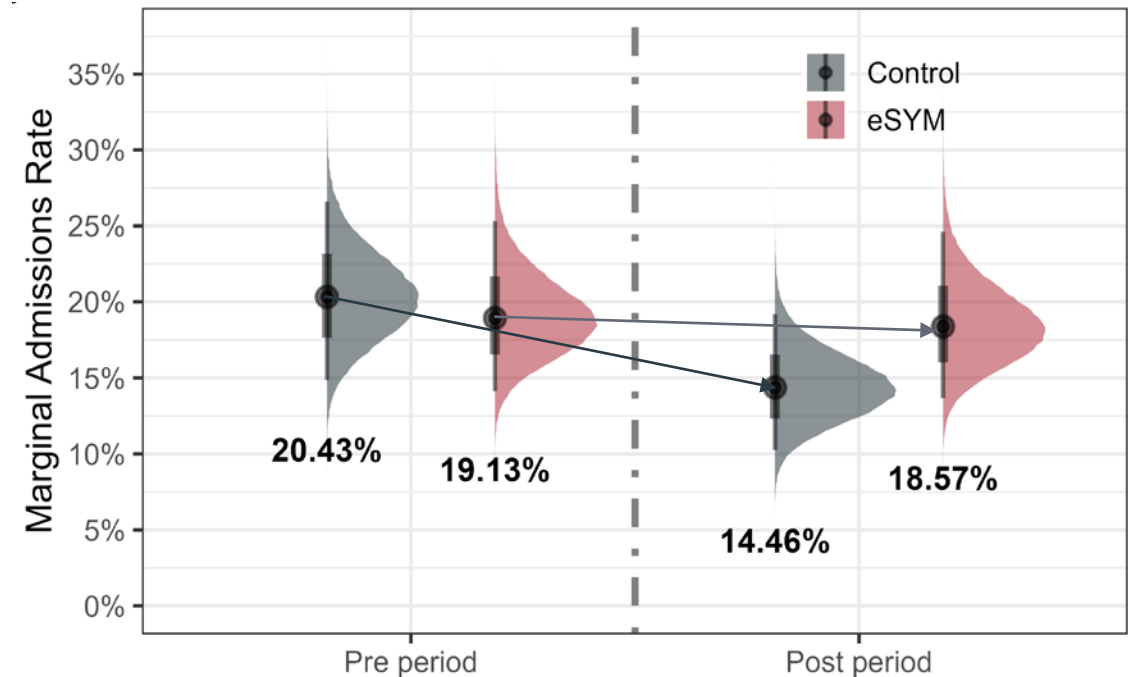
Impact of eSyM on OP35

ED Visit: -3.32%



DiD -3.32% (-8.06 - -1.21%)
Pr(eSyM)= 0.92

Admission: +5.41%



DiD 5.41% (0.96-12.04%)
Pr(eSyM)= 0.05

- Not just risk stratification
- Validates mechanism by which eSyM expected to impact

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Patient Engagement

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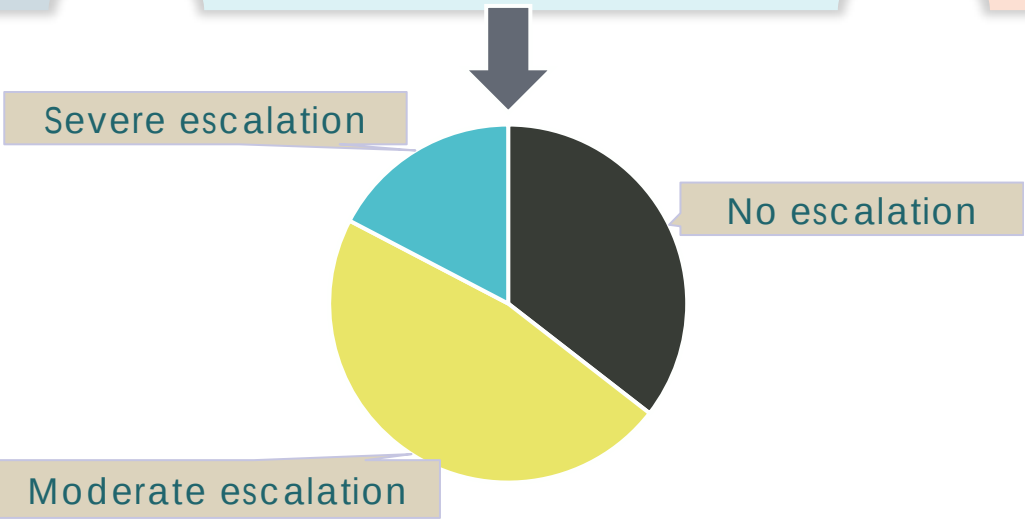
total patients enrolled

8k+

surveys submitted

77%

monthly average
engagement rate
(1+ survey submissions)





Patient Feedback



Earlier Identification of Symptoms

Patients sought help for symptoms they would have managed silently without support



Improved symptom management

Patients received guidance to manage chemotherapy-related side effects, allowing them to recover more comfortably at home.



Rapid response from the care team

Patients valued prompt follow-up calls after completing the questionnaire, making them feel heard and supported



Emotional reassurance

Proactive care team outreach reduced feelings of isolation and gave patients hope during the stress of cancer treatment



High satisfaction with service

Patients expressed gratitude for having access to this resource and felt it was an invaluable service for both patients and their families.

+54

Patient
Net Promoter Score

n=72 patients (6/2025-10/2025)

Patient Feedback

Three diverse individuals are standing against a teal background with a white grid pattern. On the left is an older woman with short grey hair, wearing a light-colored striped shirt and dark trousers. In the center is a man with short dark hair and glasses, wearing a grey sweater over a blue collared shirt and blue jeans. On the right is a woman with long dark hair, wearing a black top and grey leggings. Each person is holding a large white sign with black text.

"Thank you for making me feel so special. You called me right away after my questionnaire. You made me feel there is hope in all this!"

"This service is awesome, I'm so happy that we have this available for patients and families to use."

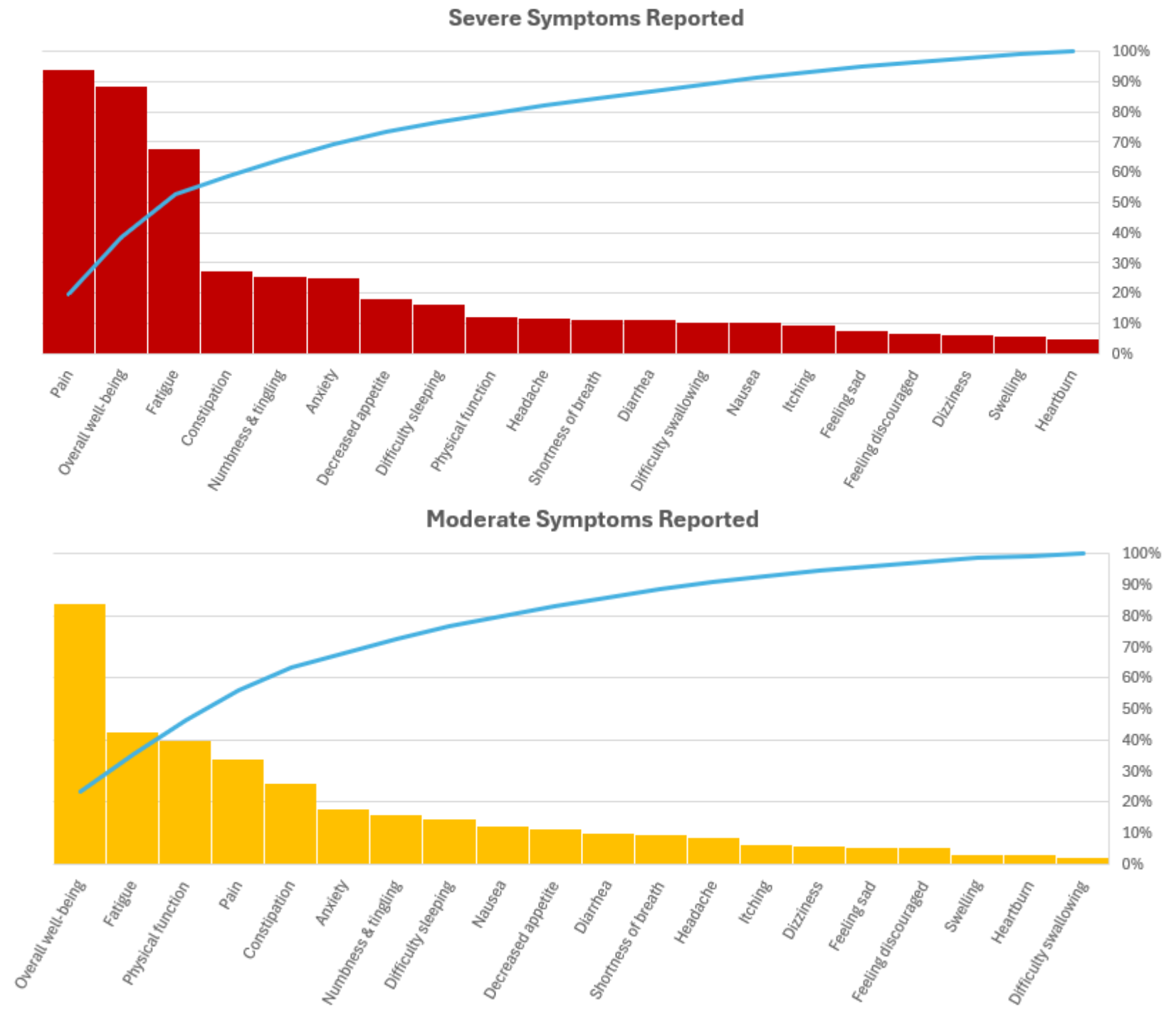
"I have come to find out that cancer can be a lonely condition. No matter having family around you. It is a comfort knowing you have someone to answer your questions and address your concerns. Thank you for being that person."

Symptom burden

of symptoms reported
per questionnaire:
Moderate: 2.0 ± 2.1
Severe: 0.5 ± 1.3

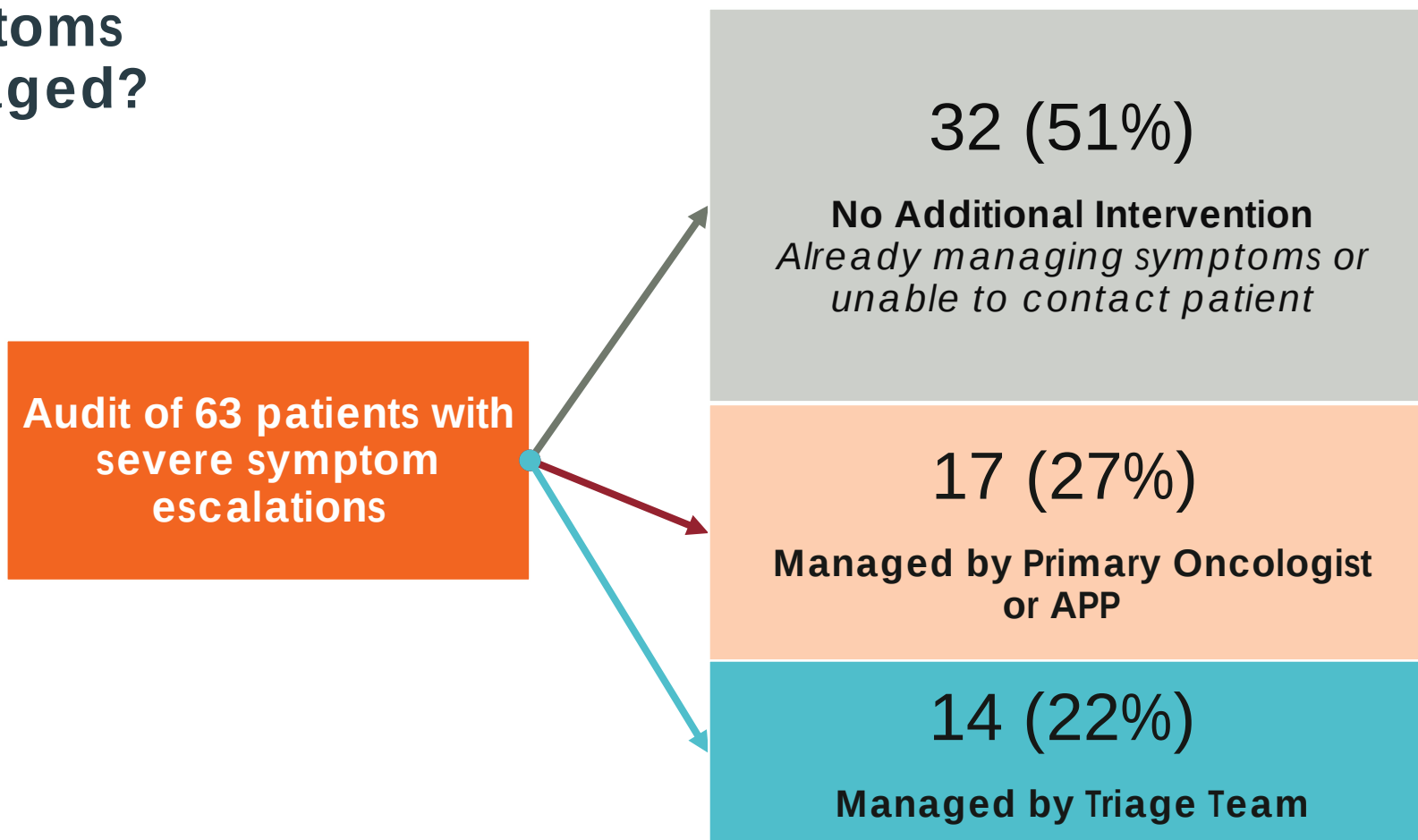
Top 3 Severe:
Pain
Overall well-being
Fatigue

Top 3 Moderate:
Overall well-being
Fatigue
Physical function





How are severe symptoms managed?



Triage nurse feedback



My father was treated here and I know he could be prideful about reporting symptoms. eSym is a venue for people to share and feel less vulnerable. This is the patient advocacy that we need everywhere.



It is rewarding for me to take the time to talk with a patient – the symptoms he reported turned out to be related to his job and lack of sleep and day/night schedule. He was grateful to have the opportunity to be transparent rather than suffer in silence.



Well being questions turn into integrative medicine conversation for the patient and the family, I wish I had better tools for communicating about well being



Pain is the most common symptom, it would be more helpful to know if the pain is new, known to be cancer related



Patients with nausea are not sure how to use their medications like zofran and compazine and we can help with that.



Alerts ebb and flow, 0-15 per day, noting lull mid week when D4 falls after weekends when chemo is not given



“ eSyM is a venue for people to share and feel less vulnerable. This is the patient advocacy that we need everywhere.

***– Triage Nurse
Responding to
eSyM survey alerts***



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Lesson #1

Set the team up for success

Engage stakeholders early and often to understand how to integrate eSyM into their existing workflows...

- o Working group of SMEs, informatics leadership, and Epic analysts met on a regular cadence for build and now for optimization
- o Centralized triage team ensures timely response and consistent protocols
- o Built trackable SmartPhrase for triage team documentation
- o Integrated eSyM data into existing Hem/Onc Synopsis views

Lesson #1

Set the team up for success

Automate enrollment

- o Enrolled via background OPA at time of first infusion
- o Engaged infusion RN to “activate” the patient, including confirming MyChart enrollment
- o Survey timed to Cycle 1, Day 4 based on anticipated peak symptoms

OurPractice Advisory

Important (1)

ⓘ This patient has been enrolled in the eSyM Medical Oncology symptom support program



- ☒ Patient has an active MyChart account
- ☐ Educate patient on the eSyM symptom support program:
 - o The patient now has symptom management tip sheets available in MyChart under Education
 - o In four days, they will receive their first weekly questionnaire

ⓘ Acknowledge Reason

Patient has been informed Patient unable to use MyChart Patient declines to participate ⌛ Defer

✓ Accept Cancel



Lesson #1

Set the team up for success

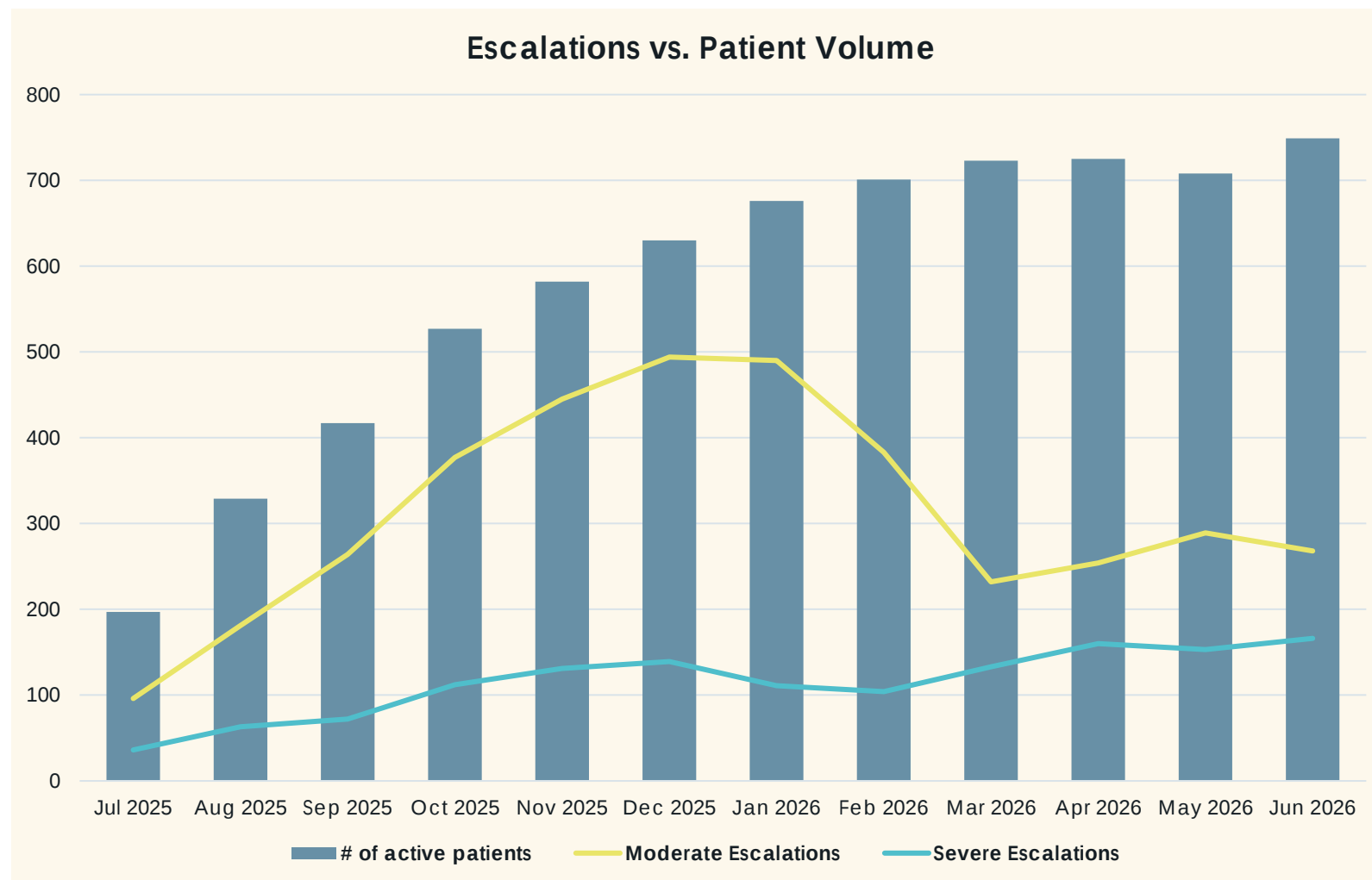
Education for patients and staff is critical

- Provided patient education via multiple venues within existing care touchpoints (*provider visit, APP chemotherapy education, first infusion, MyChart Care Companion / Oncology Care Journeys*)
- Educated staff via webinars, tip sheets, team huddles, and ongoing nurse leader rounding



Lesson #2

Manage the triage workload

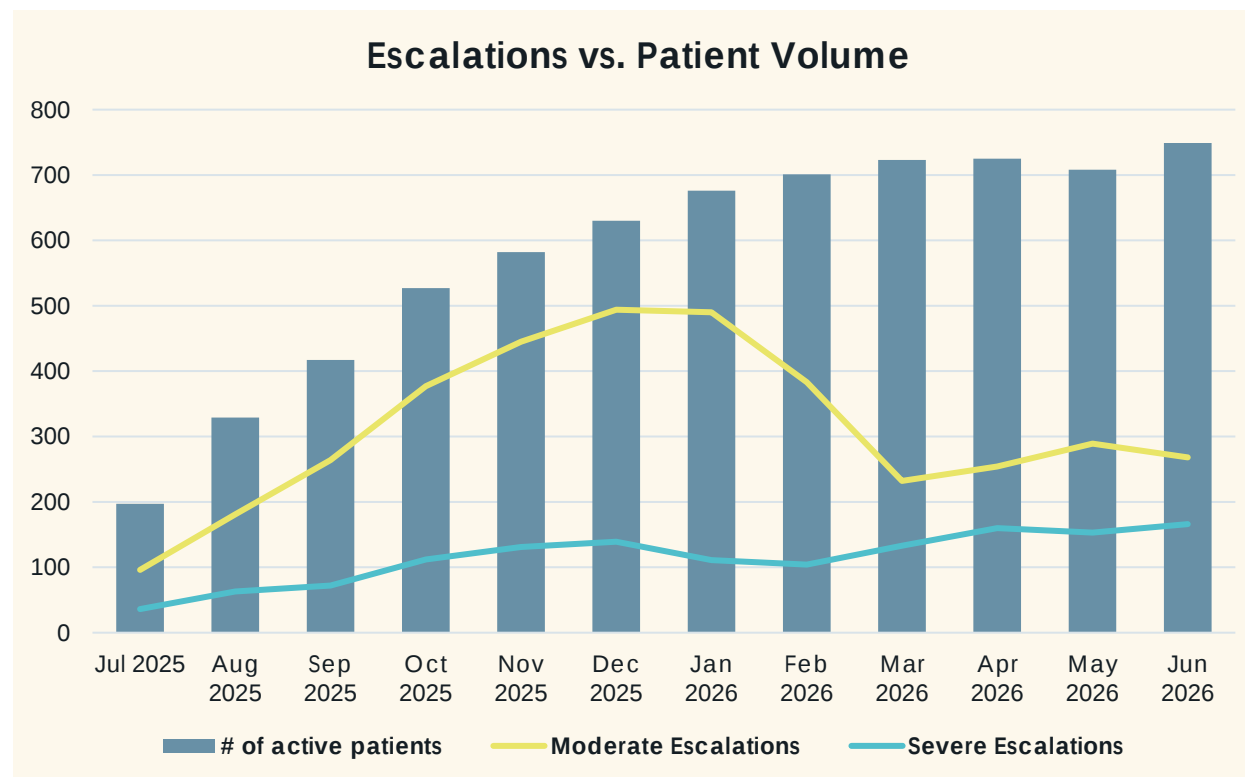


95%

Escalations triaged
within 48 hours

Lesson #2

Manage the triage workload



95%

Escalations triaged
within 48 hours

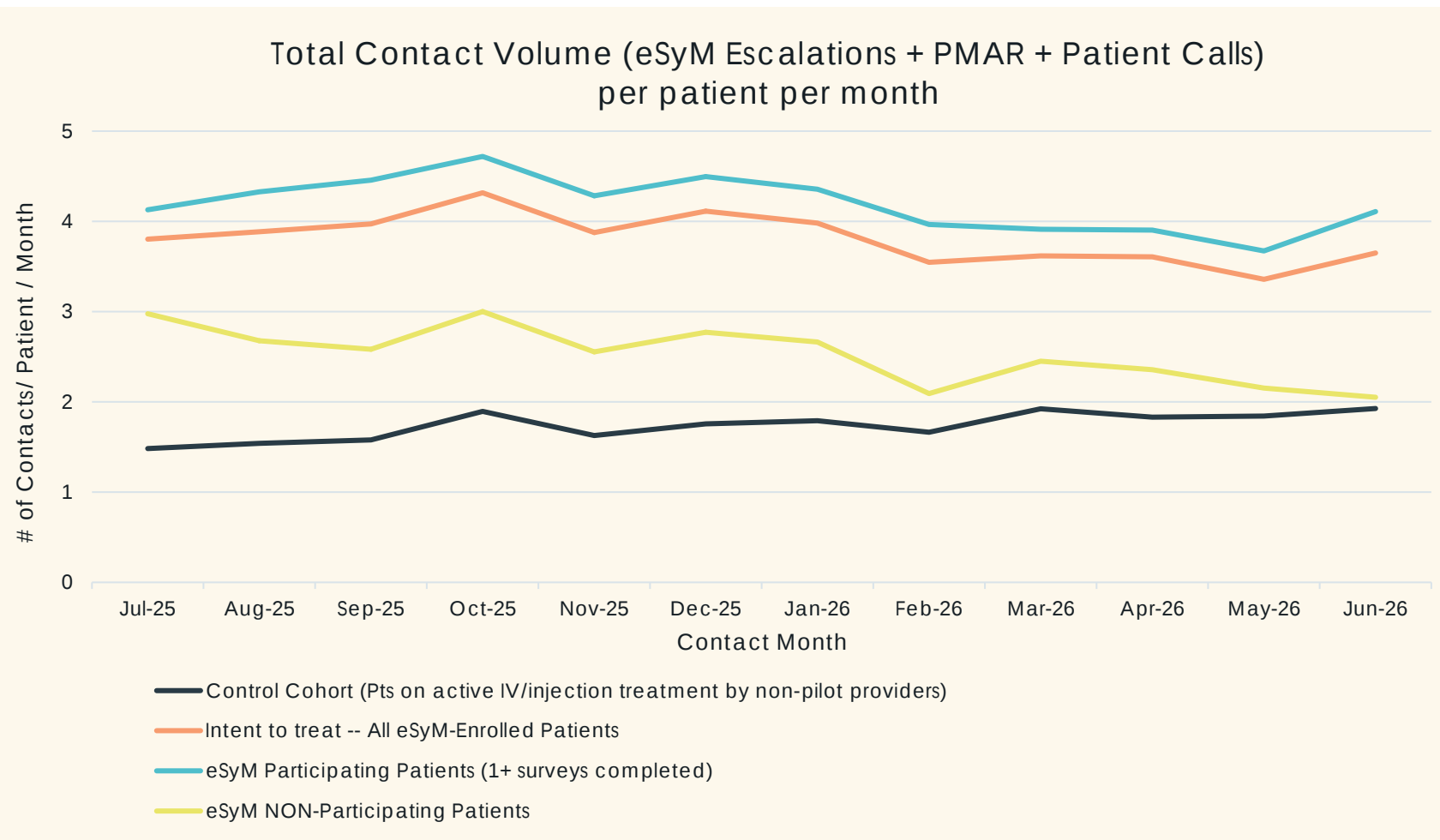
1. Moderate Rating will Automatically Trigger Triage Notification	Any (2) combination of these symptoms will trigger triage notification
SOB	nausea
Pain	vomiting
Bleeding	constipation
Diarrhea	rash
Trouble drinking flds	decreased appetite
Coughing/wheezing	numbness/tingling
Difficulty swallowing	hand & foot redness
Dizziness	headache
Fever	swelling
Heart palpitations	itching
Painful urination	mouth/throat sores
	Difficulty sleeping

Moderate ratings for these symptoms **should not** trigger triage:

Overall wellbeing, feeling discouraged, feeling sad, or difficulty concentrating, anxiety, heartburn

Lesson #3

Engaged patients embrace eSyM

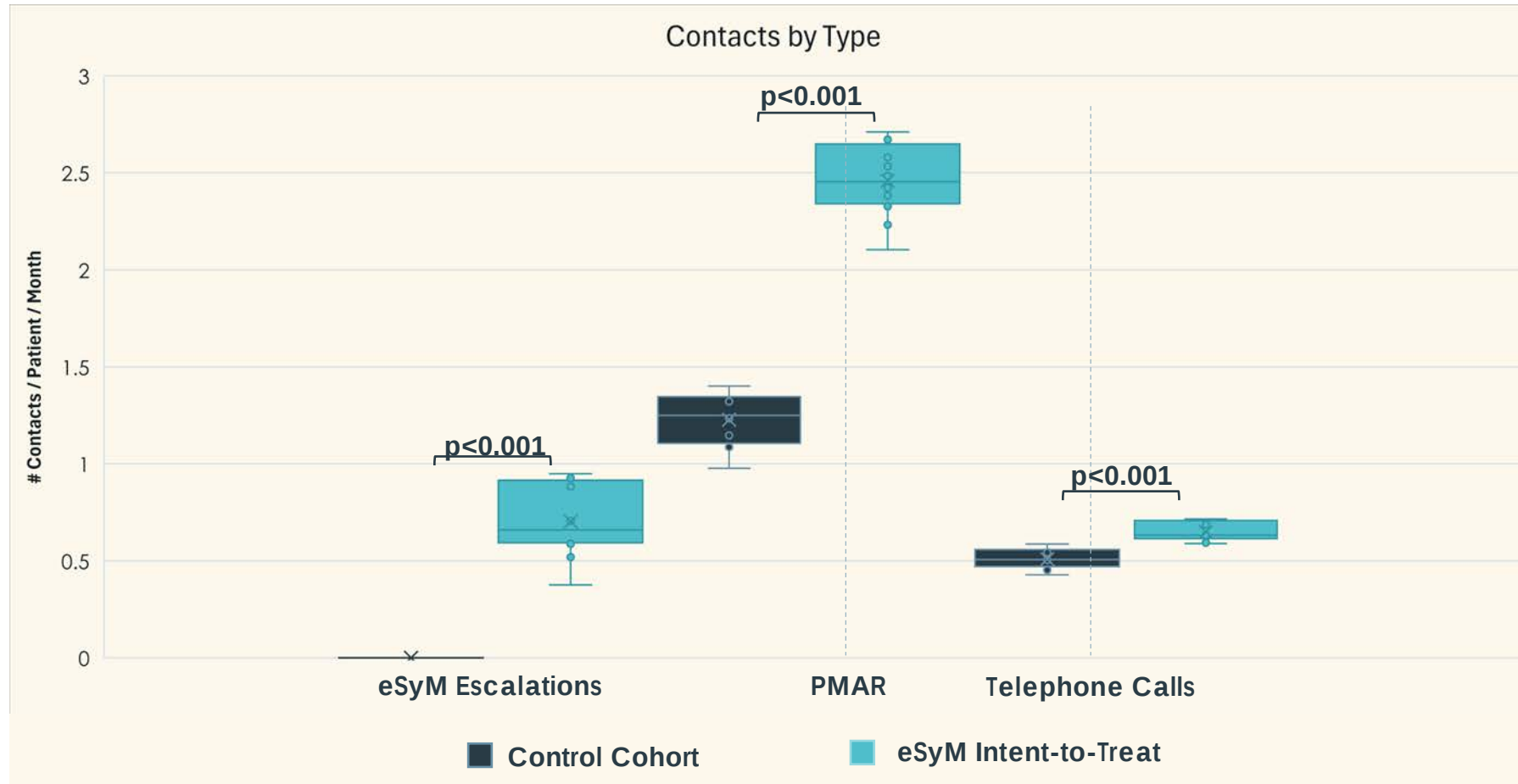


2.2 x

increase in remote clinical
contacts per month for eSyM
enrolled (intent to treat)
over control cohort

Lesson #3

Engaged patients embrace eSyM



All statistical testing performed with t-test, two-tailed, unpaired unequal distributions



Additional Challenges

- Standardization of nurse triage protocols
- Variability in perceived benefit by clinical team affects buy-in
- **Extending triage team hours to expedite response**
- No best practice for survey timing, **frequency and duration**
- **InBasket escalation routing** options limit workflow flexibility
- **Not all patients want/need triage team outreach**
- No regimen specific questionnaires, tip sheets and escalation protocols



Next Steps

- Expand availability to non-English speaking patients (*Spanish, Haitian Creole*)
- **Optimize workflow for team-based care between clinics, triage team and supportive services**
- Deploy eSyM dashboard to improve program-level visibility (*Epic Nov. 2026 release*)
- **Improve signal-to-noise through better data collection and pattern recognition**
 - Working with [OncoPRO consortium](#) to provide feedback informing Foundation System updates
 - **Upcoming: pick list, follow-up on interest in call back**
- Scale up to all of our oncology clinics
- Evaluate patient and clinical factors that contribute to patient engagement and benefit

Operational Planning Team

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Questions

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