



T1D
Exchange

**T1DX-QI BPA-TECH (Best Practice
Advisories for Tech Equity)
October Meeting**

Agenda

- Welcome
- Project Aims
- Timeline
- BPA Early Focus Group Findings
- Next Steps/Questions

Project Aims

- Aim 1: To develop and implement an EHR-based BPA using stakeholder feedback to standardize the approach for prescribing and documenting advanced diabetes technologies (ADT) (CGM, insulin pump, AID) among adult and pediatric PwT1D.
- Aim 2: To determine the effectiveness of an EMR-based BPA in reducing racial inequities in ADT.
- Aim 3: To explore the reasons identified for providers decision to not prescribe ADT and whether they were PwT1D or provider led, and the association between the reason provided and the PwT1D's race/ethnicity.

Study Timeline

Milestones	Apr-24	Jul-24	Oct-24	Jan-25	Apr-25	Jul-25	Oct-25	Jan-26	Apr-26	Jul-26	Oct-26	Jan-27
Start-up	X											
Aim 1												
Qualitative Study		X	X									
BPA develop/impl.			X	X	X							
Publication				X								
Aim 2												
BPA deployed					X	X	X	X	X			
Data collection						X	X	X	X	X		
Data analysis								X	X	X	X	
Aim 3												
Data analysis										X	X	X
Publications											X	X



BPA Early Focus Group Findings

Agenda

Today's Meeting to Discuss:

- Makeup of BPA
- Criteria to trigger
- Who to fire to
- Where should it appear
- When should it fire

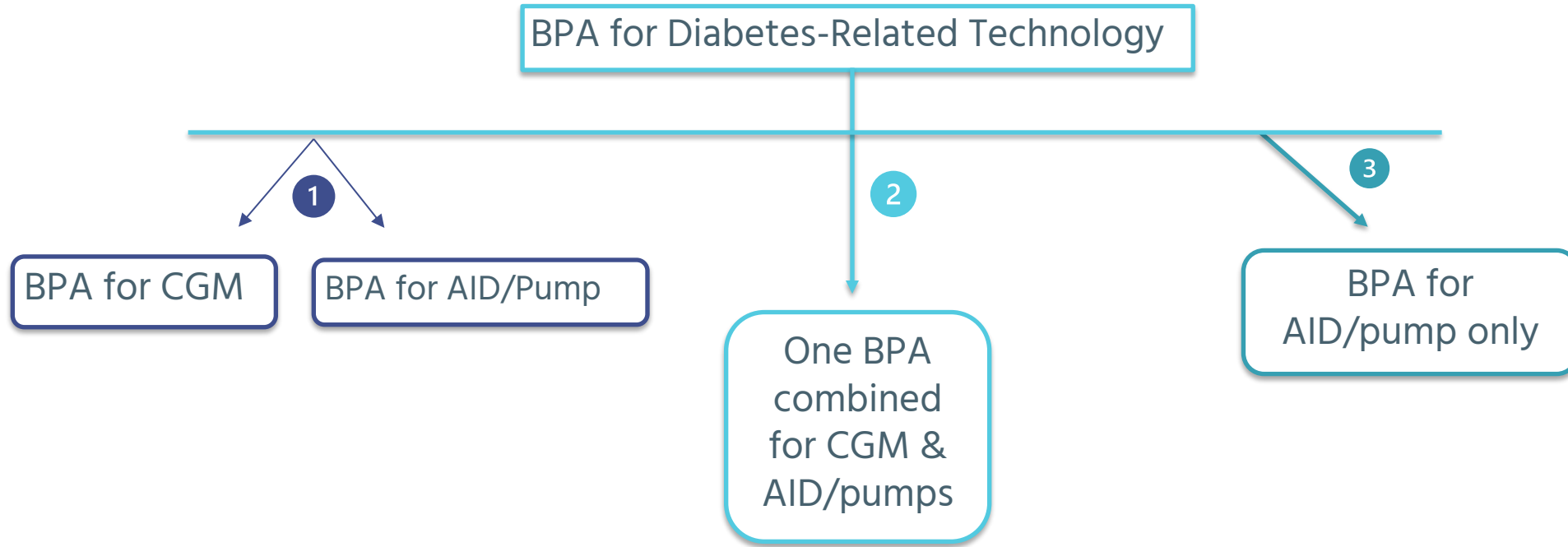
Next Meeting to Discuss:

- Passive or active in more detail
- How often should it fire
- Direct actions to take from BPA
- Ability to suppress and for how long
- Documenting reasons for patients declining

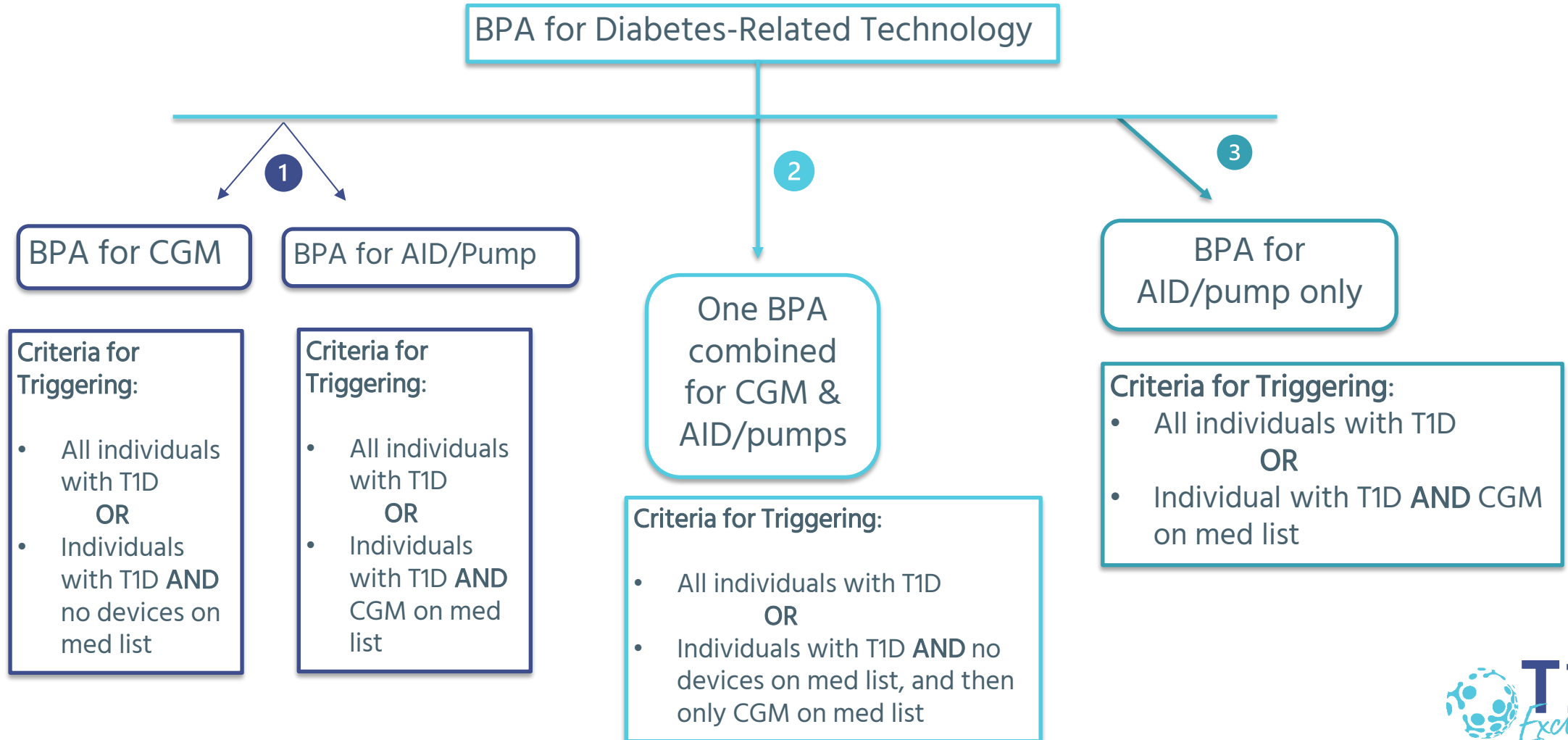
BPA Focus Group Findings

- **8** focus groups conducted with 8 clinics
- Focus groups were made up of:
 - Providers (MDs, APPs)
 - Diabetes care team members (RNs, CDCES)
 - IT specialists
- We asked questions relating to :
 - A BPA for prescribing CGMs for patients with type 1 diabetes
 - A BPA for prescribing automated insulin delivery (AID) systems for patients with type 1 diabetes

BPA for CGM, AID/Pumps, or BOTH



BPA for CGM, AID/Pumps, or BOTH



Criteria for Triggering

- All individuals with Type 1 Diabetes

"I think it should fire for **everyone [appointment]**, have that conversation,' underscoring the need to keep these technological dialogues alive and relevant."

- Individuals with T1D **AND** no devices on med list, and then only CGM on med list

"I think for CGM, diagnosis of type 1 diabetes, this BPA should be triggered for everyone, have that conversation."

"I think one would be maybe type 1s that don't have any technology use because that's really like a gap in the standard of care."

BPA Pros and Cons

Disadvantages:

- Alert fatigue
- Possible workflow interruptions (avoid this by firing it at time agreed upon)
- Recommending technology is a standard of care already implemented in clinic care

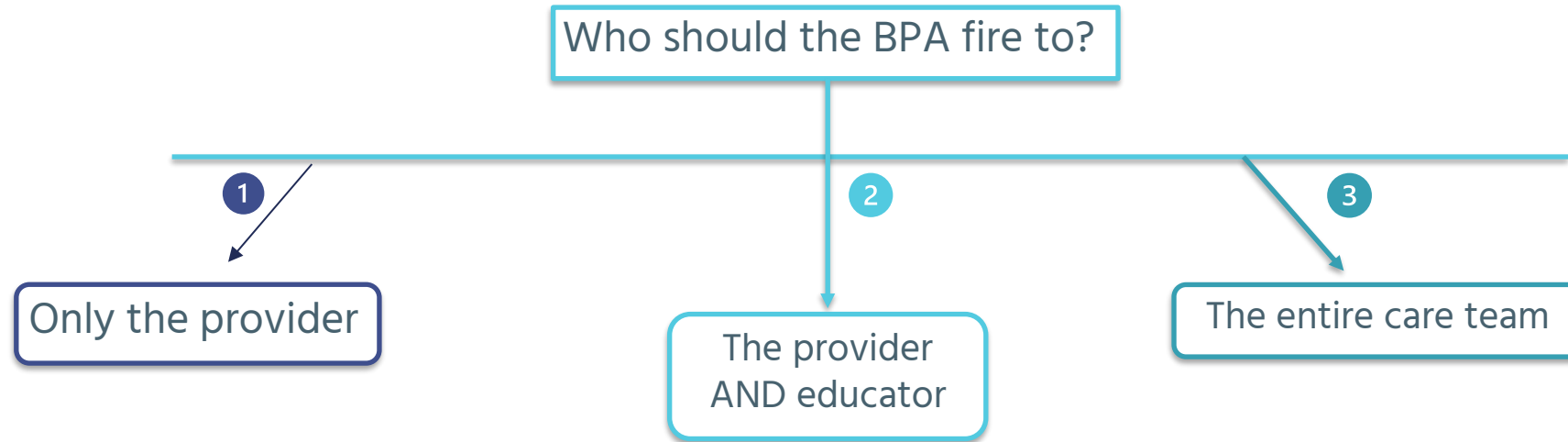
Advantages:

- Captures reasons for patients declining CGM/Pumps
- Helps to address inconsistent data reporting
- Improves documentation
- Offer provider support- the BPA will serve as a reminder and possibly offer a pathway to education referrals/prescription orders

BPA Firing Status

Ground Truth	On Med List	Not on Med List	Documented in Progress Note or elsewhere (form)
Patient Not Actually Using Device	BPA will not fire (missed opportunity) – false negative	BPA to encourage prescribing or documenting reasons declined	BPA to encourage prescribing or documenting reasons declined
Patient IS Actually Using Device	BPA will not fire	BPA to encourage med rec and data capture	BPA to encourage med rec?? BPA be suppressed by external documentation?

Who should it fire to?



Who should it fire to?

We asked: Who should the BPA be targeted to on your care team?

- Targeted to the prescribing provider **OR** provider **AND** educator

“See, that's my fear. If it's the first to open, it's not the right person.” “Either the educator or the provider.”

“**If we had all the support**, in my mind, the nurse. Seeing as **we don't** have that, I would just say I would want the ability to fill that out. Or right now, maybe just every provider in our team has the ability to fill that out.”

“I think the provider, right? So for us, it could be an APN or it could be the physician. So both see patients separately. I think that would be the case. We do have diabetes educators involved in this process, but I'm guessing if they don't want it, then it's probably the provider's job to convince, and then the diabetes educators can take it on. **But yeah, I wouldn't want it with everybody.** I don't know that it would help for the MA. So mainly the provider, maybe some additional person potentially, but not a big group.”

“I think all providers. So that would be endocrinologists, fellows, educators, for sure, all our educators. Our pharmacist, we have a full-time pharmacist because he could be talking about it to them. So I think our pharmacists, our nurse and dietitian educators, our APPs, our fellows, and our attendings.”

Who should it fire to?

We asked: Who should the BPA be targeted to on your care team?

- Targeted to each member of the diabetes/endocrine team?

“I think the **whole care team**. Yeah, I agree. The more eyes on it, I think the safer.”

“I would say the **whole team** because we do have visits with educators that are in between. And I think those are opportunities where-- this is an education appointment.”

“For us, I would say the **prescriber and the nursing team** because they usually work kind of together.”

“I would say more to **prescribing providers but also possibly to nurses** because our nurses do provide a lot of the education. And some of us go in the room first sometimes, so then we would at least know, “Okay, they want to talk about pumps today. Okay, they don't.” But I think as a prescribing provider, I always bring it up.”

“From the **nursing standpoint**, when we go into clinic visits, we do use that same encounter that the provider is using. So having it under **the provider's encounter** is beneficial because then it would kind of allow us to see that BPA and be able to guide that initial conversation, So at least when we go and kind of tell the provider about X, Y, and Z before they go in, we have a little bit more information”

Where should the BPA fire (in Epic) ?

1. Storyboard
2. Health Maintenance
3. BPA's plan
4. Hard stop BPA

1. Storyboard

The screenshot displays an Epic EHR storyboard for a patient visit on 10/21/2024. The patient is Michael Test, 41 years old, with MRN E100083913. The visit is with Mathioudakis, Nestoras Nicolas, MD for an office visit. The storyboard is organized into several sections:

- Visit Information:** Chief Complaint: No reason for visit. Recent Visits with Me: 09/30/2024 (Primary Dx), 08/01/2024 (Controlled type 2 diabetes mellitus without complication, without long-term current use of insulin). Other Visits in Endocrinology/Diabetes: None.
- Vital Signs:** No data found. Includes a 'Tobacco' section with Smoking status: Never Assessed, Smokeless status: Unknown, and Reviewed: Never reviewed.
- Communication/Interpreter:** No data found.
- Preferred Language for Contacts:** No Patient Contacts. Provided no contacts. Includes a note: 'No HCDM on file. You can use the 'Add Contact' button to add a HCDM to the list or check 'No Patient Contacts' to indicate a reason for not collecting contacts.'
- Depression Screening:** No data found.
- Questionnaires:** No questionnaires available.
- Patient Review of Clinical Information:** Problems, Medications, Allergies, and other information not reviewed by the patient or proxy.
- Problem List:** Cardiovascular and Mediastinum: CHF (congestive heart failure), Respiratory: Lung cancer, middle lobe, NSCLC of lower lobe. Other: SBE (subacute bacterial endocarditis) prophylaxis candidate, Headache.

The left sidebar contains patient demographics, provider information (Chavez, Heinz C, MD), allergies (No Known Allergies), and care gaps (DIABETIC FOOT EXAM, OPHTHALMOLOGY EXAM, URINE MICROALBUMIN, LIPID PANEL (LDL)). The bottom of the screen shows 'Start Review' and 'ADD ORDER' buttons.

2. Health Maintenance

Health Maintenance

Address Topic Edit Modifiers Report Refresh

Sort by: Status Group Name Filter to: Needs Attention Endocrinology Default

Medications from outside sources need attention. Go Reconcile

Topic	Status	
Current Care Gaps (4 hidden)		
HEMOGLOBIN A1C	Overdue since 6/5/2024	
INFLUENZA VACCINE (1)	Overdue since 8/1/2024	
DIABETIC FOOT EXAM	Never done	
OPHTHALMOLOGY EXAM	Never done	
URINE MICROALBUMIN	Never done	
LIPID PANEL (LDL)	Never done	
HEPATITIS B SCREENING	Never done	
DEPRESSION SCREENING	Never done	
Awaiting Completion		
ESTIMATED GLOMERULAR FILTRATIONS RATE (eGFR)	Ordered on 2/15/2024	
Upcoming (1 hidden)		
RSV VACCINE ADULT (1 - 1-dose 75+ series)	Next due on 7/21/2058	
Completed or No Longer Recommended (2 hidden)		
RSV Antibodies	Aged Out	

Select a Health Maintenance topic

3. BPAs (Plan)

10/21/2024 visit with Mathioudakis, Nestoras Nicolas, MD for Office Visit

Progress Notes Pre-Op H&P Procedures Prep for Procedure Enc Summary Non-Oncology Therapy Plans UpToDate Pain Treatment Plan Change Provider

Problem List Goals **OurPractice Advisories**

Problem List

Search for problem + Add Show: Past Problems

Diagnosis

Other

- CHF (congestive heart failure)
- Headache
- Lung cancer, middle lobe
- + Metastases: Edit None
- Open Oncology History 2 events documented
- NSCLC of lower lobe
- + Metastases: Edit None
- Open Oncology History 2 events documented
- SBE (subacute bacterial endocarditis) prophylaxis candidate

Mark as Reviewed Never Reviewed Problem List Activity

Patient Goals

Search for goal + Add

No active goals

Use the box to the upper left to add a new goal.

View Past Values

OurPractice Advisories

Care Guidance/Quality (4) Expand All

- Influenza vaccine due. Order the immunization, document the immunization in the Immunizations activity, give a reason for not giving the immunization, or add the exclusion modifier to remove from influenza plan.
- Depression screening. Patient has not had a depression screening during this calendar year.
- Diabetic testing. This patient is due for diabetes test(s)/service(s). Click the Accept button to open the recommended SmartSet.
- MyChart BP Questionnaire Incomplete

Other (1)

- Text

Accept All

Therapy Plans - Non-Oncology

Open the Non-Oncology Therapy Plan Activity

PDMP Information

PDMP Information

Medication Management

+ Patient-Reported

Reconcile Outside Medications Open Orders

Outpatient and Clinic-Administered Medications

- adalimumab-aaty (Yuflyma.CF) 40 mg/0.4 mL SyKt
- 40 mg, Every 14 days
Summary: Inject 40 mg under the skin every 14 (fourteen) days., Starting Thu 3/28/2024, Historical Med
- flucONAZOLE (DIFLUCAN) 100 MG tablet
- 150 mg, Daily
Summary: Take 1.5 tablets (150 mg total) by mouth daily., Historical Med
- lidocaine (LIDODERM) 5 % patch
- 1 patch, Daily
Summary: Place 1 patch onto the skin daily, Remove & Discard patch within 12 hours or as directed by M
Historical Med
Patient not taking, Reported on 6/6/2024
- lisinopriL (PRINIVIL) 10 MG tablet
- Summary: test, Starting Thu 3/14/2024, Normal
Patient not taking, Reported on 6/6/2024
- lisinopriL (PRINIVIL) 2.5 MG tablet
- 5 mg, Daily
Summary: Take 2 tablets (5 mg total) by mouth daily., Startin Wed 1/31/2024, Until Thu 1/30/2025, Normal
- methylPREDNISolone (MEDROL DOSE PACK) 4 mg tablet
- Summary: Take as directed, Normal
- metoprolol SUCCINATE (TOPROL-XL) 25 MG 24 hr tablet
- 25 mg, Daily
Summary: Take 1 tablet (25 mg total) by mouth daily., Startin Wed 1/31/2024, Until Thu 1/30/2025, Normal

Hospital Medications

- acetaminophen (OFIRMEV) IVPB 1,000 mg / 100 mL Premix
- Intra-op PRN
Summary: Intravenous, Administer over 15 Minutes, Intra-op PRN, Starting on Thu 2/29/24 at 1531, Anesthesia Intra-op
- dexMEEtomidine (PRECEDEX) 400 mcg in sodium chloride 0.9 % 100 mL infusion
- Continuous PRN
Summary: Intravenous, Continuous PRN, Starting on Thu 2/29/24 at 1531, Anesthesia Intra-op



4. Hard Stop Active BPA

The screenshot displays the Epic EHR interface for a patient named Michael Test. A modal window titled "Medication Warnings for Test, Michael" is open, showing a "New Warnings (1)" section with a "High" severity warning for "Duplicate Therapy: lisinopril". The warning details include "Angiotensin Converting Enzyme (ACE) Inhibitors, Angiotensin Inhibiting Agents" and lists three active lisinopril prescriptions: "lisinopril, (PRINIVIL) tablet 10 mg, Daily", "lisinopril, (PRINIVIL) 10 MG tablet", and "lisinopril, (PRINIVIL) 2.5 MG tablet, Daily". The modal also includes an "Override reason" field, a "Clinician Reviewed" checkbox, and "Dose Appropriate", "Benefit outweighs risk", and "Inaccurate Warning" options. The background interface shows the patient's problem list, care coordination notes, and various advisories, including a "MyChart BP Questionnaire Incomplete" warning.

When should it fire?

- Before encounter begins/pre-charting
- At the beginning of the clinical encounter and then can snooze?

“The BPA would appear when you open up the patient chart at the **beginning of the visit.**”

'I want it to remind me in the **beginning** prominently to say, 'Hey, this one's not on a pump, and have you thought about it?'

“If there's a snooze button, say, 'Okay, I don't want to talk about this now... But **remind me again** in three to five minutes.’”

When should it fire?

- At the end when you are writing up your visit notes and have to submit it

Pro: "It could even just pop up before the doctor signs the visit and then just have a reminder, "Hey, did you have this conversation?""

Con: "If the BPA fires at the conclusion of the visit, it **risks being overlooked**, as providers are often in a '**sign-off**' mentality."



Next Steps/ Questions