



Thank you for joining

The presentation will
begin shortly



Rise to Immunize® Monthly Webinar

Optimizing EHR Tools for Adult Immunizations

John Clark, MD, PhD (Sharp Rees-Stealy Medical Group)

October 16th, 2025

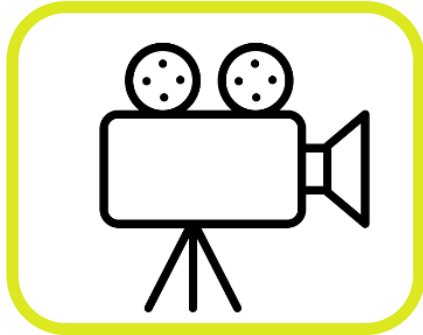
Today's Webinar



- **Campaign Updates**
 - RIZE Action Month Highlights Video
 - Data submission updates
 - Resource of the Month: Sanofi Outreach Templates
- **Optimizing EHR Tools for Adult Immunizations**
 - John Clark, MD, PhD (Sharp Rees-Stealy Medical Group)
- **Q&A Session**



Webinar Reminders



Today's webinar recording will be available the **week of 10/20**

- Will be sent via email
- Will be available on website

(RiseToImmunize.org → "Resources" → "Webinars")



Ask questions during the webinar using the **Q&A feature**

- Questions will be answered at the end of the presentation



AMGATM

Advancing High Performance Health

Blinded Comparative Report



Available **November 19th**
on our RIZE Data
Dashboard!

*Adds Q3 2025 to previous
report*



Resource of the Month: Sanofi Outreach Templates



HIT Outreach Templates to help enhance Confidence

1. Patient Portal and Email Example Message Template:

Subject: Safe, Effective, and Trusted: Time to Get Your Immunizations!

Dear [Patient's Name],

We understand that making decisions about your health is important and personal. Immunizations are one of the best ways to help protect yourself and possibly those around you from adverse health outcomes caused by vaccine preventable diseases.

Vaccines undergo a rigorous review of laboratory and clinical data to ensure the safety and efficacy of these products.

They are backed by credible organizations like the CDC and governing bodies such as ACIP (Advisory Committee on Immunization Protocols), which support their ability to prevent illnesses, save lives, and help build community immunity.

By staying up-to-date with your immunizations, you're taking a proactive step to protect your health and the health of others. We're here to answer any questions you may have and help you feel confident in your decision to get vaccinated.

If you're ready to schedule your next well-visit or have any concerns, don't hesitate to reach out. We're here to help you!



Today's Speakers



John Clark, MD, PhD, Chief Population Health Officer, Sharp Rees-Stealy Medical Group



Optimizing EHR Tools for Adult Immunizations

John D. Clark, MD PhD
Chief Population Health Officer
Sharp Rees-Stealy Medical Group



What You'll Learn

- Recent history and success of EHR tools
- Design high-yield clinical decision support (CDS) while minimizing alert fatigue
- Operationalize reminder/recall and outreach via portal, SMS, IVR
- Measure impact with a pragmatic immunization scorecard

Agenda

- Why adult immunization is and has been an EHR problem
- Workflow & CDS patterns that move the needle
- Outreach & equity: portal/SMS/IVR + SDOH
- Measurement: AIS-E + missed opportunities
- Q&A

Why This Matters

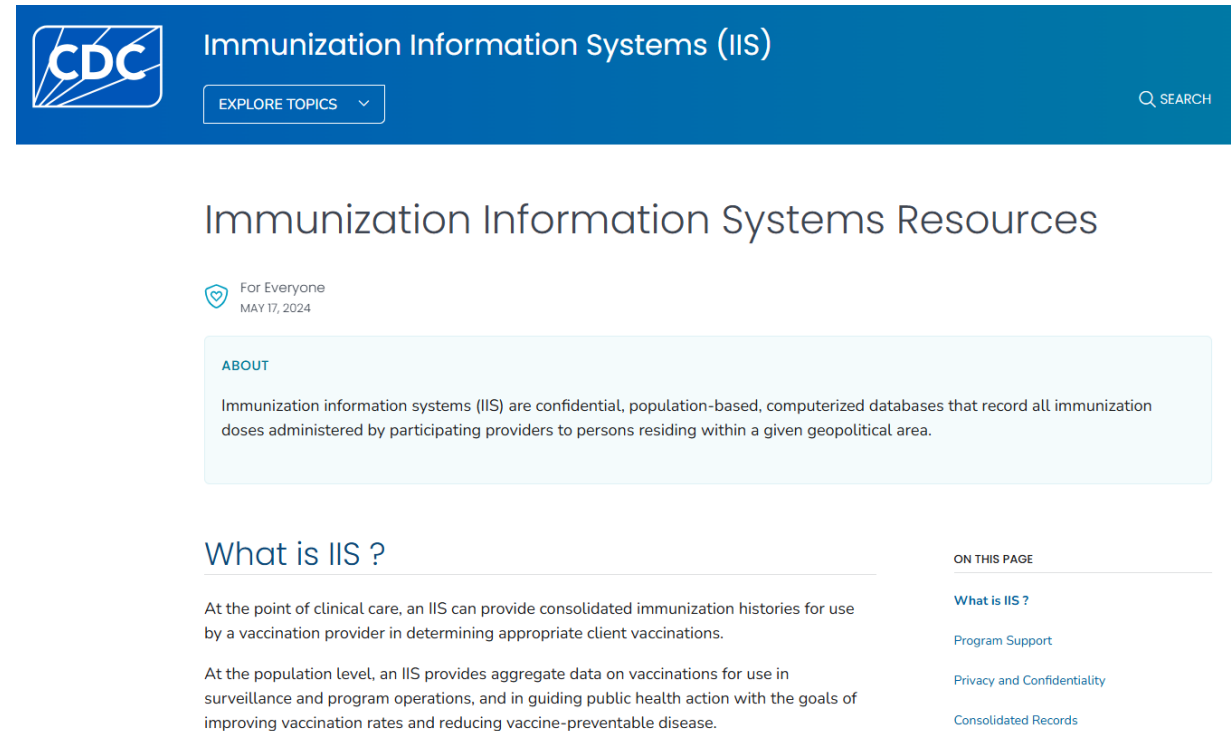
- Adult coverage remains suboptimal
 - Disparities persist by race/ethnicity, income and geography
- Most missed opportunities occur during routine visits and at discharge
 - Fixable via workflow + CDS
- EHRs + IIS create a single source of truth and power point-of-care vaccination

Building the Data Foundation

Recent history and success of EHR tools

IIS Bi-directional Connectivity

- Immunization Information System (IIS)
 - HL7 (submit) and QBP/RSP (query) per national and state guides
- Automate pre-visit queries
- Reconcile into HER immunization history
- Forecast at point of care using a standards-based engine



CDC Immunization Information Systems (IIS)

EXPLORE TOPICS

SEARCH

Immunization Information Systems Resources

For Everyone
MAY 17, 2024

ABOUT

Immunization information systems (IIS) are confidential, population-based, computerized databases that record all immunization doses administered by participating providers to persons residing within a given geopolitical area.

What is IIS ?

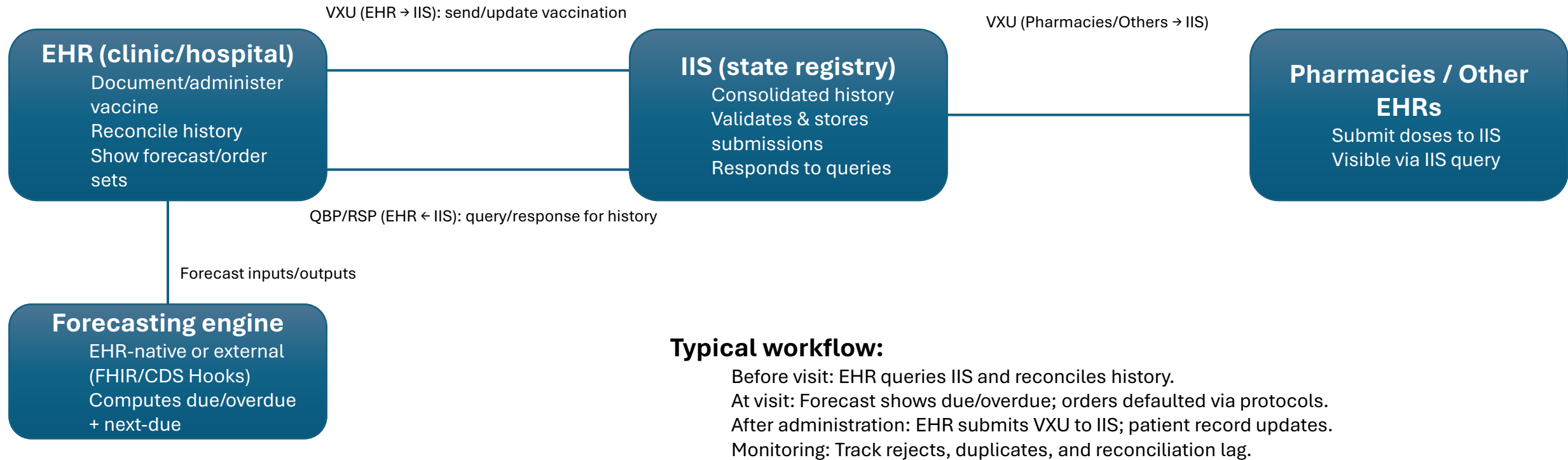
At the point of clinical care, an IIS can provide consolidated immunization histories for use by a vaccination provider in determining appropriate client vaccinations.

At the population level, an IIS provides aggregate data on vaccinations for use in surveillance and program operations, and in guiding public health action with the goals of improving vaccination rates and reducing vaccine-preventable disease.

ON THIS PAGE

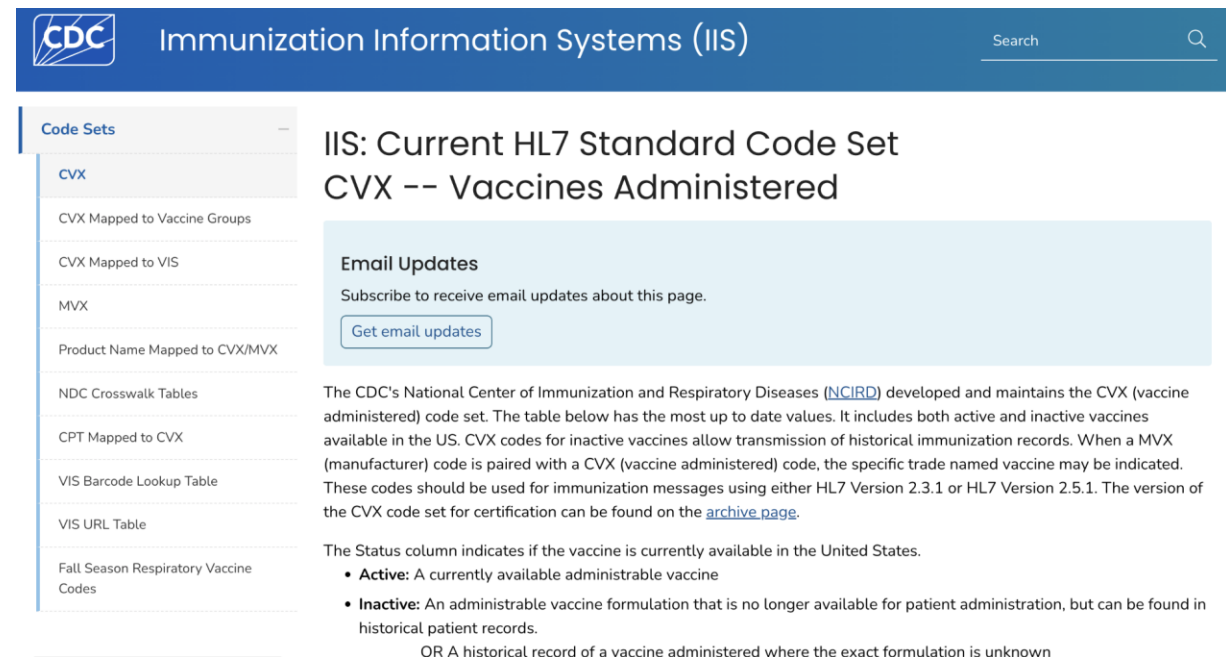
- [What is IIS ?](#)
- [Program Support](#)
- [Privacy and Confidentiality](#)
- [Consolidated Records](#)

How IIS works with your EHR (bi-directional flow)



Code correctness = fewer rejects, fewer mismatches

- Use CDC code sets: CVX (vaccine), MVX (manufacturer), NDC crosswalk; map CPT→CVX for legacy
- Keep VIS link/versioning and product name mappings current
- Monitor reject reasons and data quality (e.g., AIRA Data-at-Rest indicators)



The screenshot shows the CDC Immunization Information Systems (IIS) website. The header includes the CDC logo and the text "Immunization Information Systems (IIS)" with a search bar. The left sidebar lists "Code Sets" with links to CVX, MVX, NDC Crosswalk Tables, CPT Mapped to CVX, VIS Barcode Lookup Table, VIS URL Table, and Fall Season Respiratory Vaccine Codes. The main content area is titled "IIS: Current HL7 Standard Code Set CVX -- Vaccines Administered". It includes an "Email Updates" section with a "Get email updates" button. Below this, there is a paragraph explaining the CVX code set and its use in HL7 messages. A "Status" column is mentioned, with definitions for "Active" and "Inactive" vaccine formulations. A note at the bottom states "OR A historical record of a vaccine administered where the exact formulation is unknown".

IIS: Current HL7 Standard Code Set CVX -- Vaccines Administered

Email Updates
Subscribe to receive email updates about this page.
[Get email updates](#)

The CDC's National Center of Immunization and Respiratory Diseases ([NCIRD](#)) developed and maintains the CVX (vaccine administered) code set. The table below has the most up to date values. It includes both active and inactive vaccines available in the US. CVX codes for inactive vaccines allow transmission of historical immunization records. When a MVX (manufacturer) code is paired with a CVX (vaccine administered) code, the specific trade named vaccine may be indicated. These codes should be used for immunization messages using either HL7 Version 2.3.1 or HL7 Version 2.5.1. The version of the CVX code set for certification can be found on the [archive page](#).

The Status column indicates if the vaccine is currently available in the United States.

- **Active:** A currently available administrable vaccine
- **Inactive:** An administrable vaccine formulation that is no longer available for patient administration, but can be found in historical patient records.

OR A historical record of a vaccine administered where the exact formulation is unknown

Workflow & CSD Patterns

Design for defaults, active choice, and the ‘five rights’ of CDS

Primary care: high-yield patterns

One-Click Ordering: Immunizations Currently Due SmartSet

Immunizations Currently Due

- Pediatric Immunization Schedule
- Pediatric Immunization Catch-up Schedule
- Adult Immunization Schedule
- Immunization indications for adults based on medical conditions
- Contraindications to immunizations for adults

Immunizations

Immunizations that are currently due

- ☒ Hepatitis A
 - ☒ Hep A (State)
 - ☒ Routine, Station, STATE SUPPLIED VACCINE
- ☒ Pentacel
 - ☒ Pentacel (State) (Dtap-Hib-IPV)
 - ☒ Routine, Station, STATE SUPPLIED VACCINE
- ☒ PCV13
 - ☒ PCV#13 (State)
 - ☒ Routine, Station, STATE SUPPLIED VACCINE
- ☒ Need for vaccination [Z23]

Patient is DUE for a flu vaccine

- ☐ Flu Vaccine - Injectable
- ☐ Normal

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RELIANT MEDICAL GROUP
Part of OptumCare®

- Hyperlinks to CDC websites
- All vaccines that are due for the patient based on HM are defaulted
- Logic gets the patient to full immunity as quickly as possible AND with the fewest shots possible (following the ACIP schedule and appropriate use of combination vaccines)
- Defaults a state-specific product vs. purchased product based on billing rules in your state
- Note: we show if flu is due but do not default due to high refusal rate
- We made the decision that if a patient is due for 2 out of 3 or 3 out of 4 components of a combination vaccine the combination product is defaulted

- Active choice for MAs/clinicians: vaccination order must be accepted or declined
- Default-checked vaccine orders when eligible (with easy opt-out)
- Pre-visit plan: surface due/overdue + co-administration opportunities

Epic XGM 2022: Complete Immunization Decision
Support from Soup to Nuts. Lloyd Fisher MD

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Primary care: high-yield patterns

Why is Epic telling me that my patient needs a PPSV23?

Care Gap (1)

A Pneumococcal vaccine is currently due.

Open the Immunization SmartSet to order the appropriate vaccine

Patient is due for a **PPSV23 (Pneumovax)** vaccine today

This will complete their pneumococcal vaccine series.

Conditions increasing pneumococcal risk:
Diabetes
Asplenia

[click to see the CDC Guidelines for Pneumococcal Vaccine](#)
[Guidelines on the use of pneumococcal vaccines in adults](#)
[Guidelines on the use of pneumococcal vaccines in children](#)

Open SmartSet Do Not Open Immunizations Currently Due Preview

Postpone Do Not Postpone Pneumococcal (#2[2 - PPSV23 or PCV20) Edit details

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State vs. Purchased vs. Part D

Immunizations that are currently due

- ☒ Hepatitis B (Heplisav-B)
- ☒ Hepatitis B - 2 Dose Schedule (Heplisav) ⓘ
Routine, Station
- ☒ PCV
- ☒ PCV20 (Purchased) - NEW PREFERRED OPTION FOR 19+
Routine, Station
- ☐ PCV13 (Purchased)
Station
- ☒ Tdap (Part D) - Rx to be sent to pharmacy
- ☒ Tetanus-Diphth-Acell Pertussis (BOOSTRIX) 5-2.5-18.5 LF-MCG/0.5 injection
Inject 0.5 mL into a muscle - for 1 dose
Normal, Disp-0.5 mL, R-0
If EACH is specified, 1 EACH = 1 Syringe

ⓘ This medication will not be e-prescribed. Invalid items: Pharmacy

Patient has Medicare:

1. Hep B is covered under Medicare Part B in patients with certain medical conditions (this patient has Type II DM).
2. Pneumococcal is always covered under Part B.
3. Tdap is covered under Part D so defaults a prescription (ERX record) to be sent to the pharmacy.

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Epic XGM 2022: Complete Immunization Decision
Support from Soup to Nuts. Lloyd Fisher MD

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Inpatient & ED: don't waste the bed

- Discharge-time BPA for flu/COVID/Td/Tdap, soft-stop with bedside administration or scheduled follow-up
- Order groups with default-checked vaccine orders and nursing protocols
- Gamified campaigns and service-level feedback maintain momentum

Alert fatigue: governance + design

- Follow CDS Five Rights; reserve interruptive alerts for high-risk/now-or-never moments
- Tune logic with IIS + EHR data for specificity; collect override reasons and iterate
- Use passive reminders (health maintenance) for routine prompts; monitor alert volume weekly

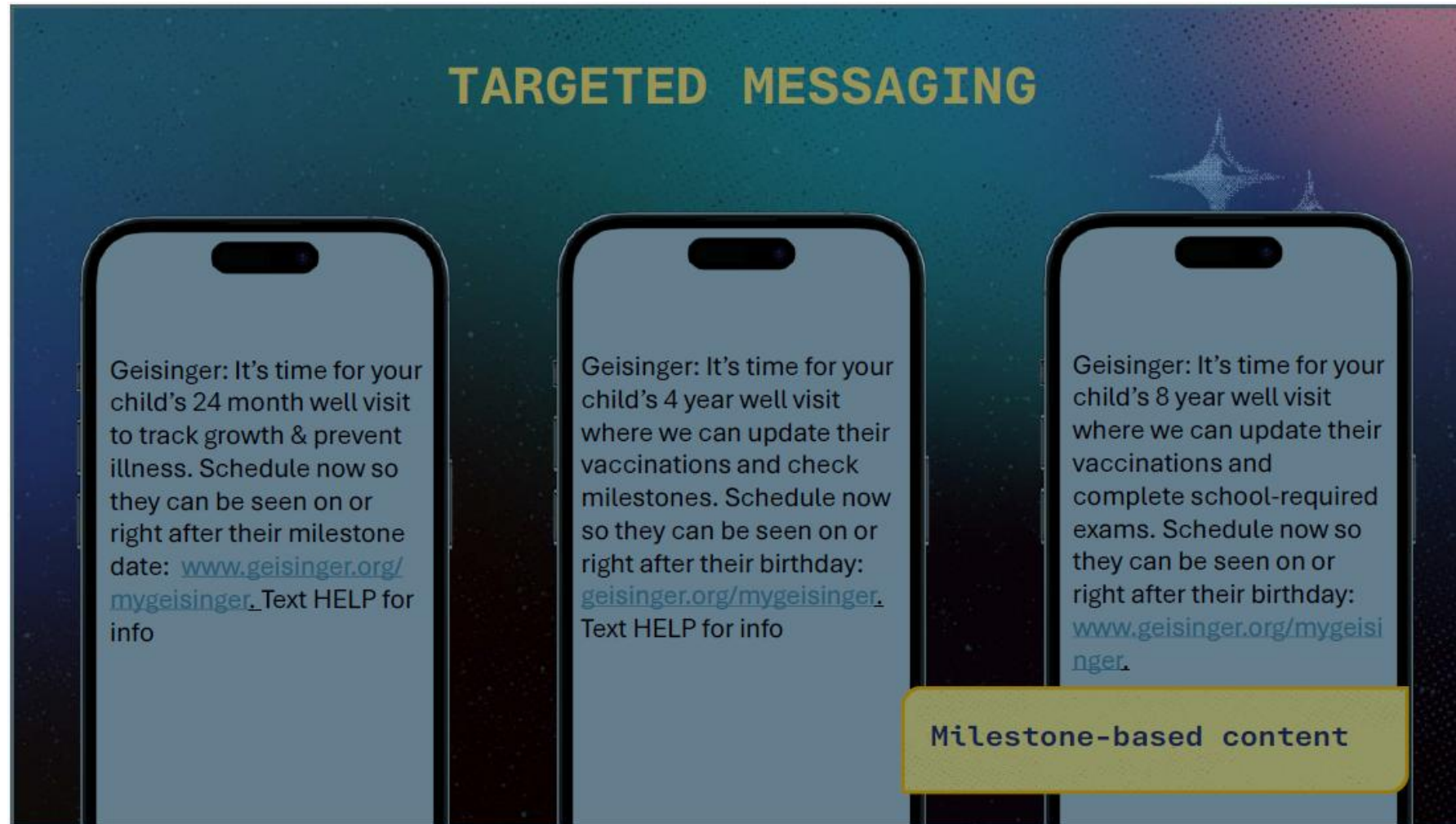
Outreach & Equity

Close gaps outside the visit & design for inclusivity

Reminder/recall that actually works

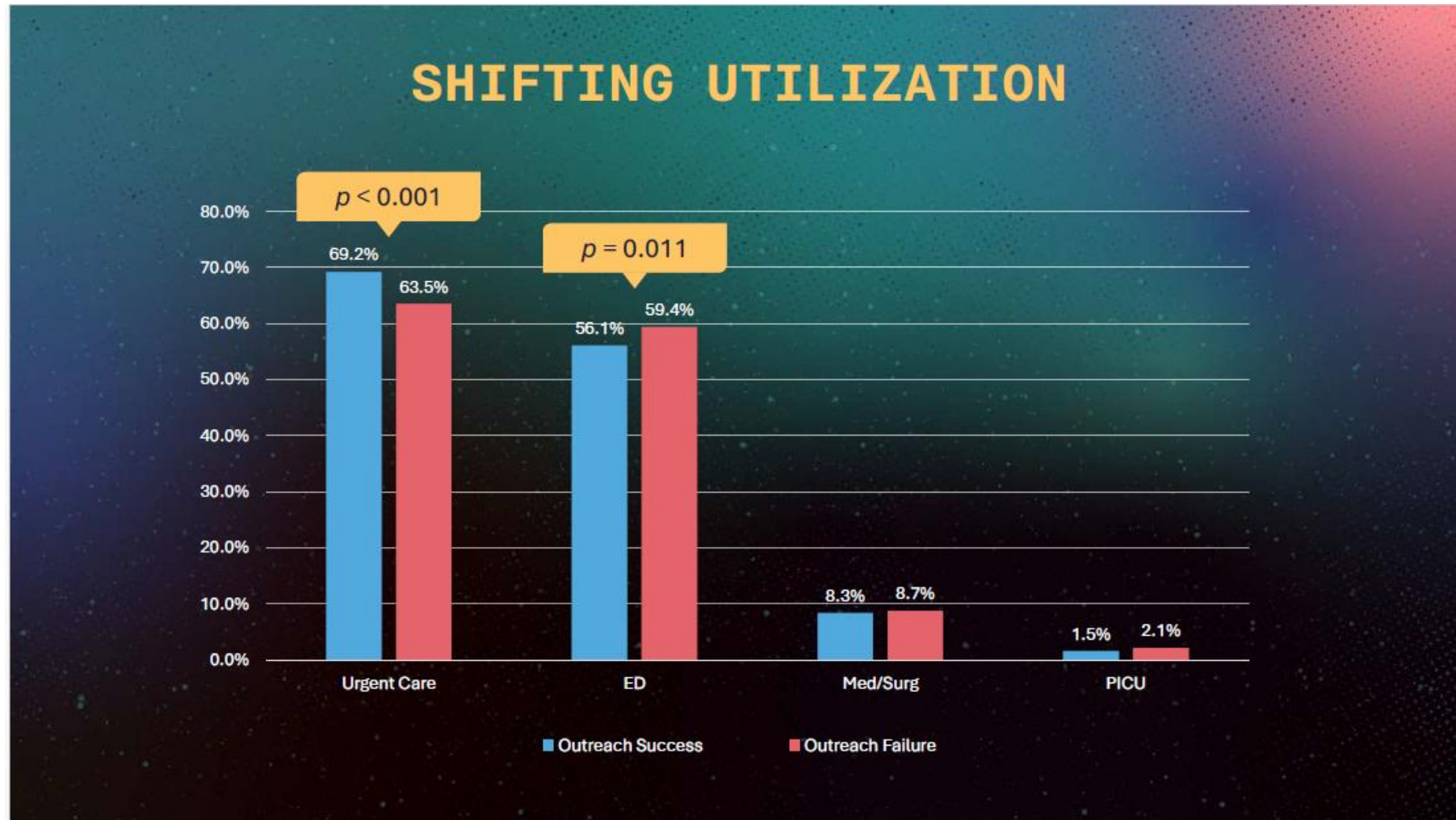
- Use portal + SMS + IVR; send 2–3 nudges per season
- Personalize content (clinic, vaccine, due date) and language; offer self-scheduling
- Track bounce/undeliverable; escalate to phone or mail when needed
- Doing “double duty” – offer preventive/Medicare Wellness Visit

Epic UGM: Boosting Pediatric Preventive Care Through CDM Outreach Campaigns. Justin Azar MD



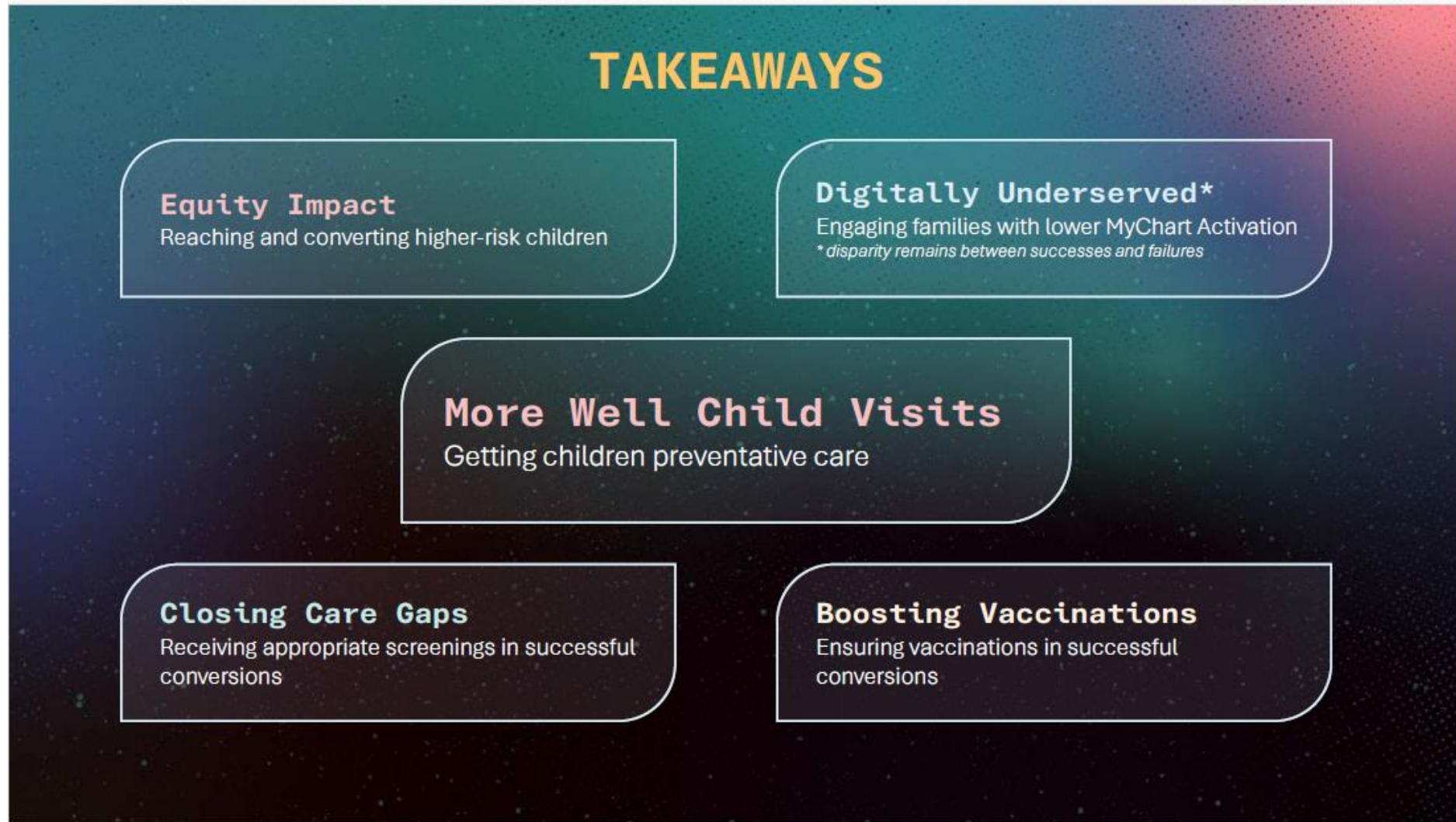
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Epic UGM: Boosting Pediatric Preventive Care Through CDM Outreach Campaigns. Justin Azar MD



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Design for equity

- Use EHR SDOH flags to prioritize outreach and on-site access (walk-in, extended hours)
- Offer culturally and linguistically tailored messages; capture preferred language and contact modality
- Report rates by race/ethnicity, language, payer, and neighborhood deprivation to focus effort

Measurement & Improvement

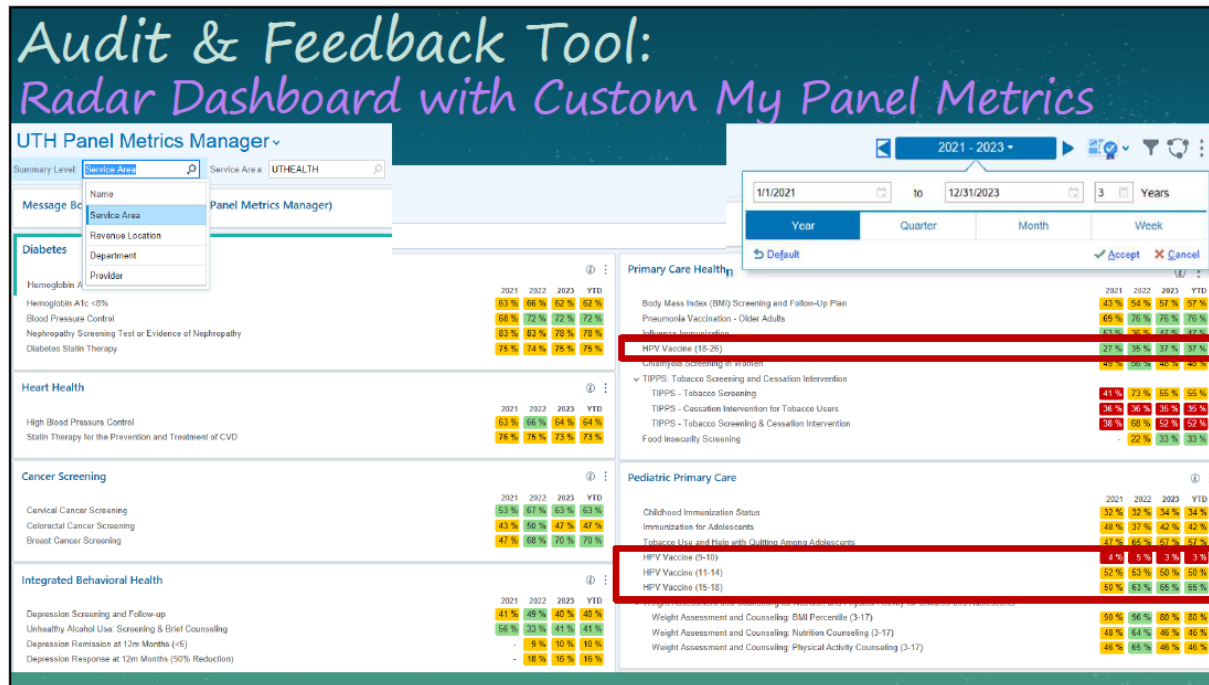
Make success visible and actionable

A Pragmatic Scorecard

Outcome: HEDIS AIS-E (MY2025) and scheme-specific coverage (flu, COVID-19, Td/Tdap, zoster, PCV/PPSV, HepB, HPV, RSV)

Process: % visits with forecast reviewed | % eligible with order placed | % orders administered

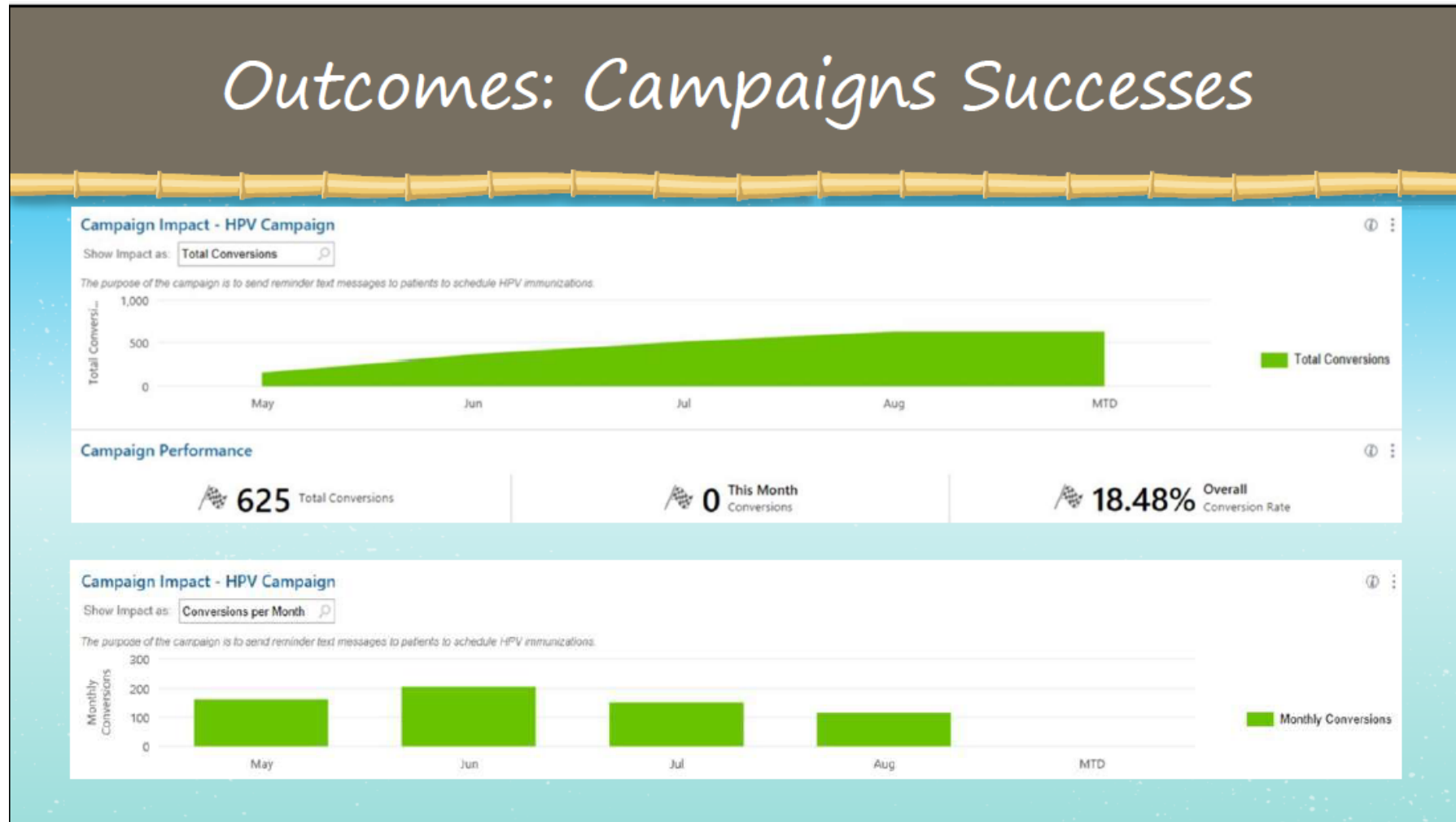
Opportunity: Missed opportunities per 100 eligible encounters; alert override rate



Epic UGM: Campaigns and Other Tools for Improved HPV Vaccination Rates. UT Health Houston

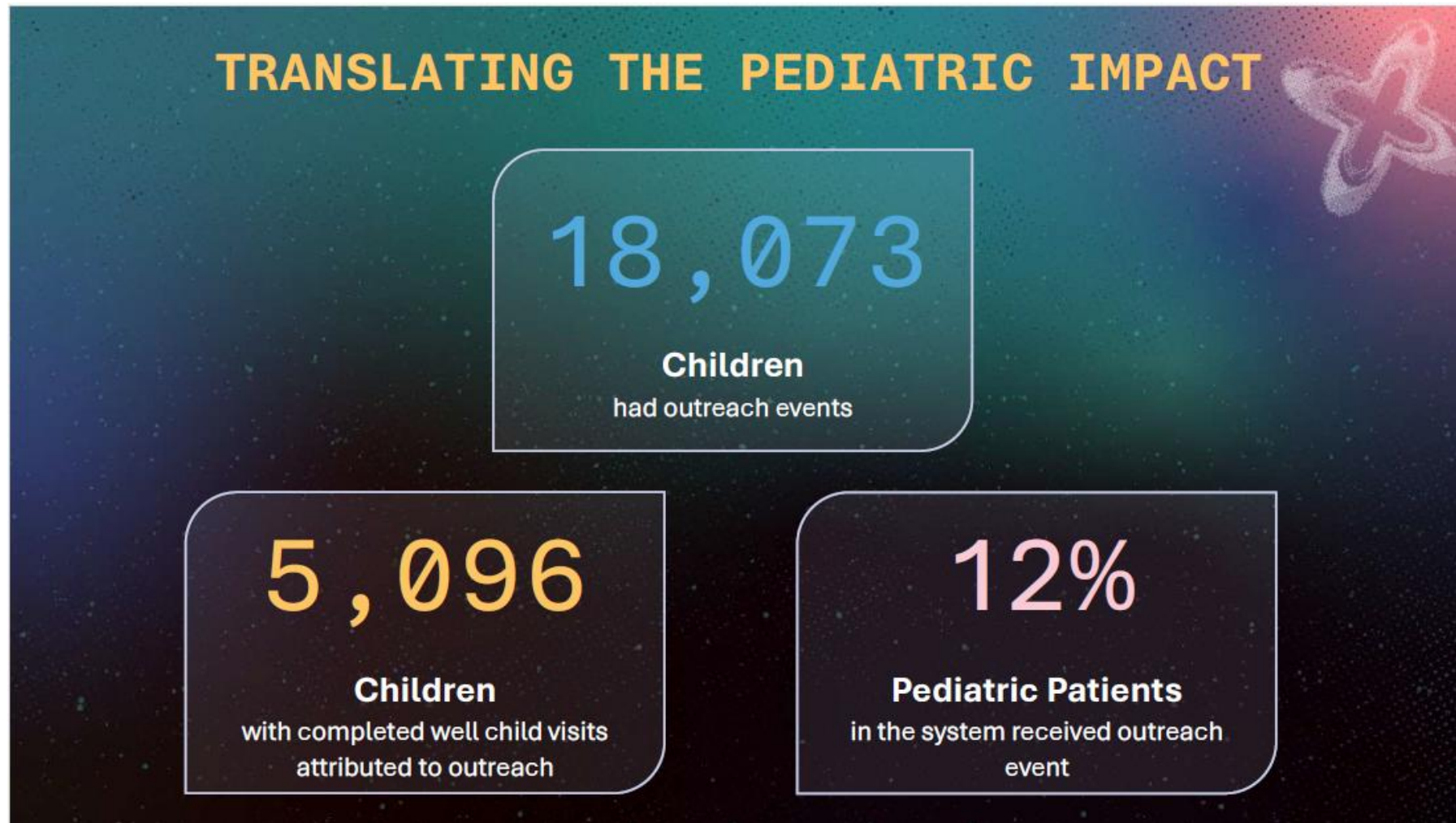
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Epic UGM: Campaigns and Other Tools for Improved HPV Vaccination Rates. UT Health Houston



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Epic UGM: Boosting Pediatric Preventive Care Through CDM Outreach Campaigns. Justin Azar MD



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30/60/90-day rollout

- 30 days: determine primary “problems” and goals, baseline scorecard
- 60 days: pilot active choice + default orders in 1–2 clinics; launch outreach
- 90 days: expand system-wide; tune alerts; publish equity dashboard

Upcoming Webinar



Topic: Year 4 Data and RIZE Awards



Date/ Time: Thursday, November 20th at 2pm ET



Presenter: Stephen Shields, MPH, *AMGA* and representatives from RIZE award-winning groups

Questions?



Submit your
questions using the
Q&A feature at the
bottom of the screen