

Closing the ROP Follow-Up Gap: An Automated EHR Email Alert for the Patients discharged at Children's hospital Without Ophthalmology Follow-Up

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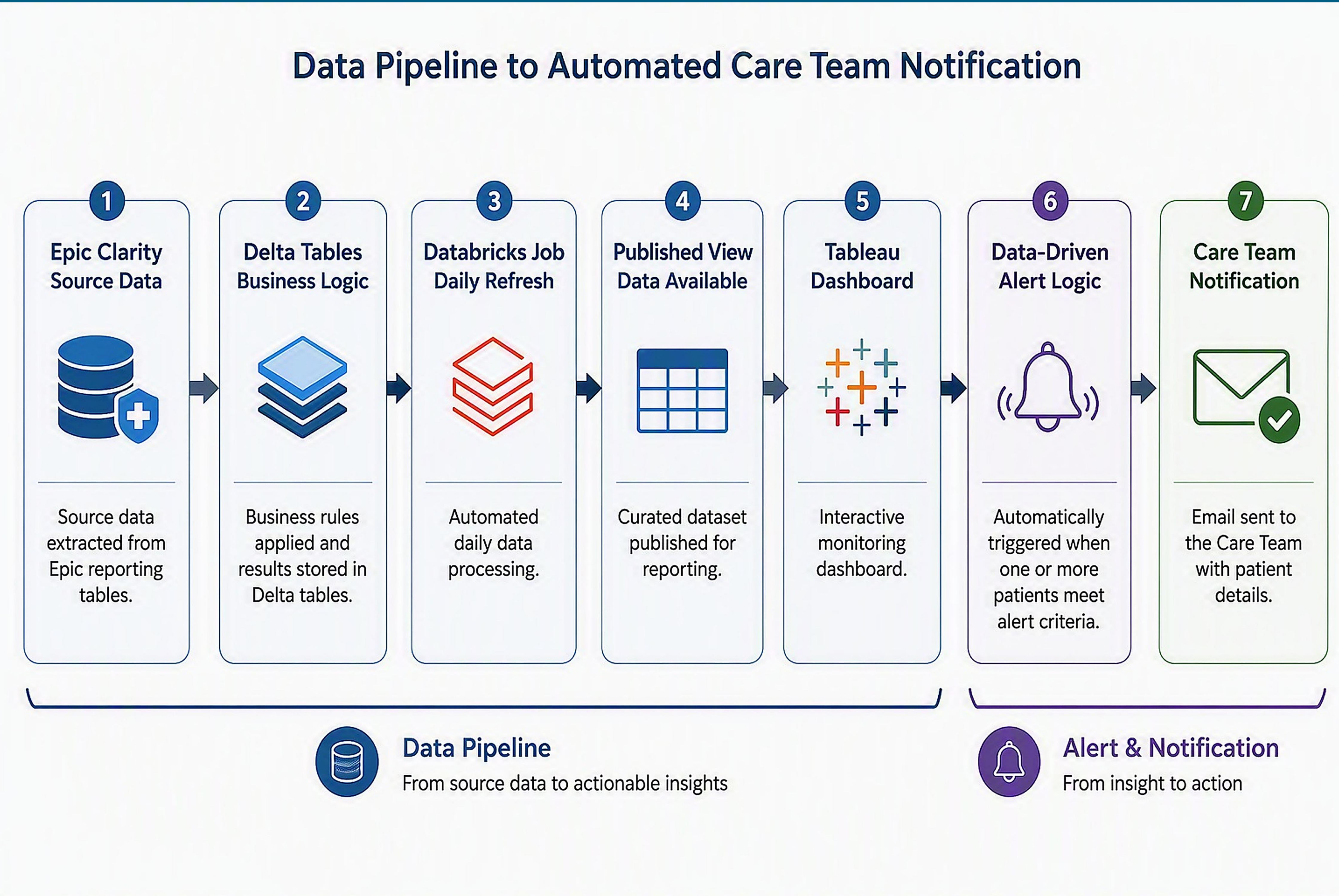
PURPOSE

- Retinopathy of Prematurity (ROP) is a major preventable cause of blindness in premature babies.
- The goal is to build this logic outside Epic and send automated email alerts, eliminating all manual work.
- Today, scheduling these follow-up exams relies on manual coordination, which can lead to missed appointments and patient risk.

METHODS

- Data Source: Epic Clarity
- Cohort : Patients discharged in the last 50 hours; Monroe Carell unit; alive; not hospice, SNF(Skilled Nursing Facility) or transfer; >= 1 day in a NICU bed.
- Validation : Step-level count; chart review of every alert; reverse test against ophthalmology-identified cases.

Epic cannot send this alert. We built the logic in Databricks, published it to Tableau, and let Tableau email the care team – with no human involvement.



ROP Discharge Follow UP

Mrn	Patient Id	CSN	Patient Name	Birth Date	Hosp Admsn Time	Admit Unit	Hosp Disch Time	Disch Unit	Disch Disp
*****	*****	*****	*****	**/**/****.*.*.*	**/**/****.*.*.*	VCH 4 NICU	**/**/****.*.*.*	VCH 4 NICU	Home or Self Care



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ROP LOGIC

- From cohort patient list meet 1 ROP Indicator
- No future Ophthalmology appointment in scheduled status.

ROP indicators(Any one condition):

- ROP Eligibility, Exam Date, Birth weight and gestational age

OUTCOMES

- An alert is triggered when any of four ROP indicators is detected.
- The alert includes Patient ID, Encounter ID, Discharge Unit, and the indicator(s) that triggered the alert.



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