CARILION Women's

Eating an Elephant:

Application of quality improvement tools to pursue big aims through small steps of change

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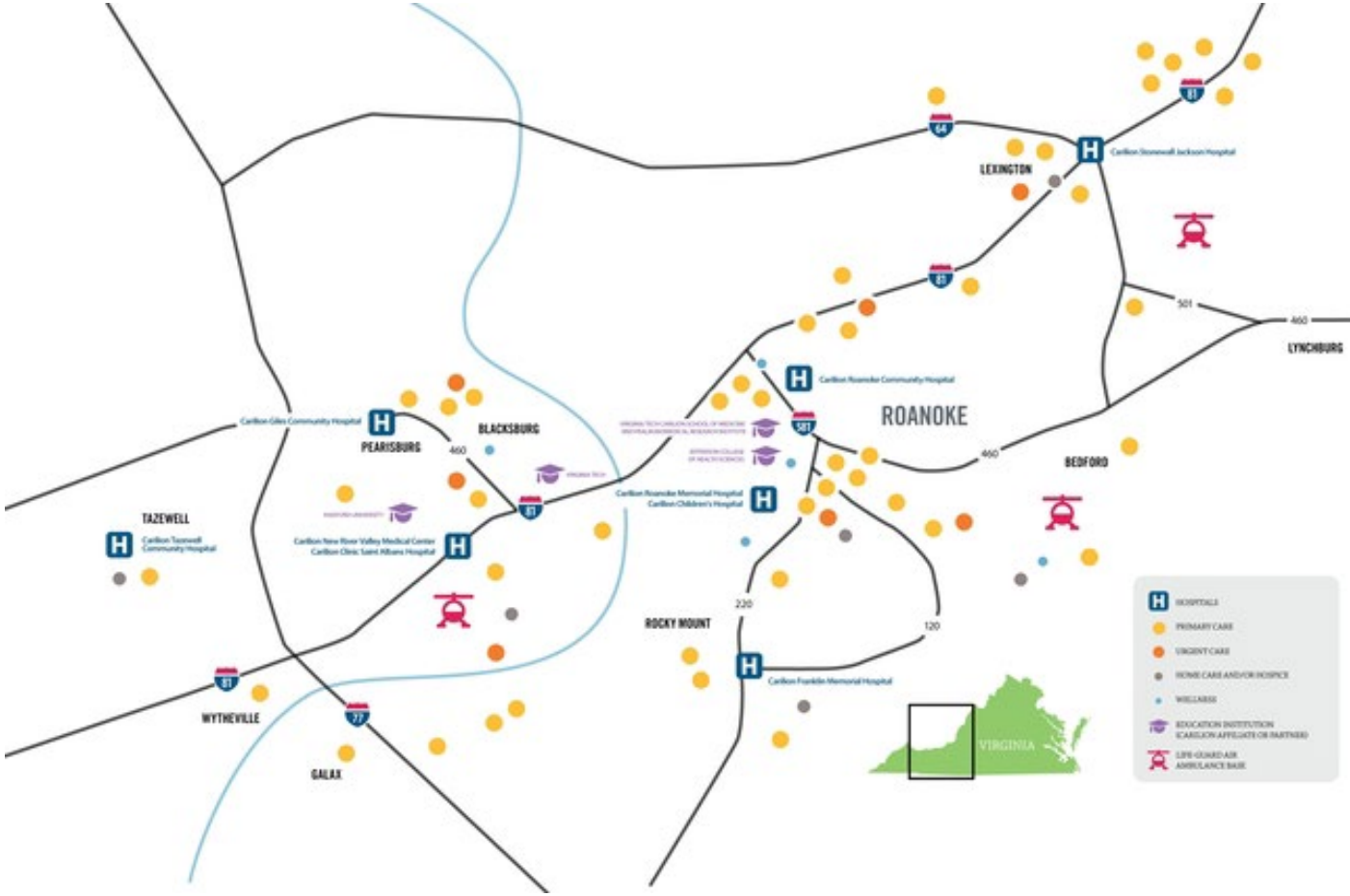
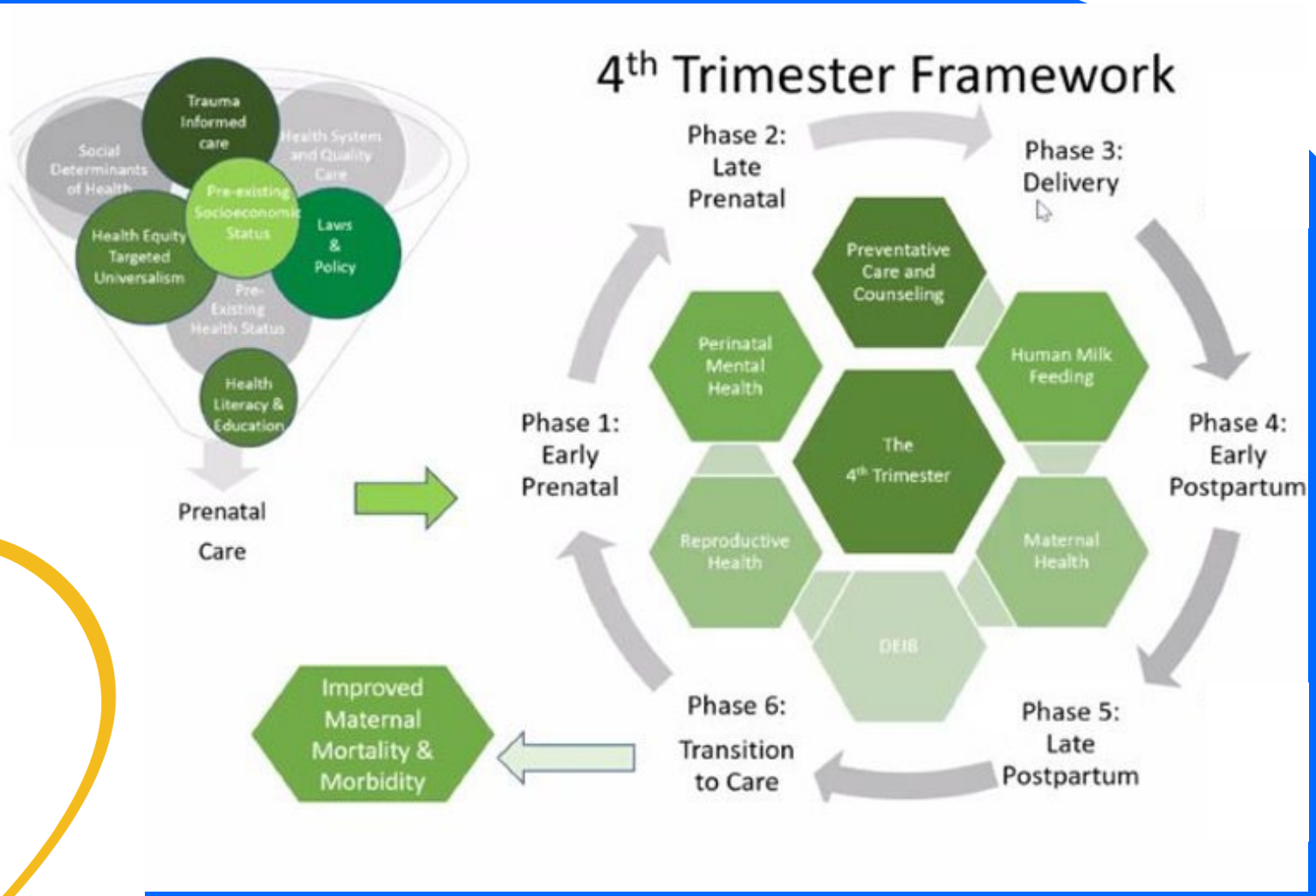
Women's



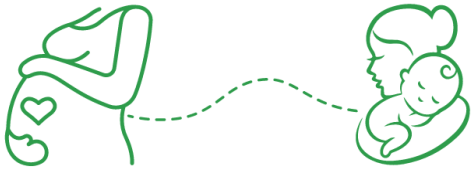
VNPC

Virginia Neonatal Perinatal Collaborative



VNPC

EMBRACE



the 4th Initiative:
Equitable care for **M**others and **B**abies through **R**eadiness, **A**ccess, and **C**ommunity **E**xpansion

VNPC Project EMBRACE Workplan 2023						
	Early Prenatal (1st & 2nd Trimester)	**Late Prenatal (3rd Trimester and Admission)**	**Delivery—All pregnancy outcomes (Admission to Discharge)**	**Early Postpartum (Discharge to 3 weeks postpartum)**	**Late Postpartum (4 weeks to 6 months postpartum)**	**Transition (6-12 months postpartum)**
	Phase 1	**Phase 2**	**Phase 3**	**Phase 4**	**Phase 5**	**Phase 6 (Transition)**
Goal	*Screening *Risk assessment *Awareness of changes to body and new baby *Discuss culturally relevant aspects of patient care (e.g., religious practices).	*Coordination of care, *Shared decision making *Planning for changes as a dyad	*Preventative care *Education *Individualized dentification of risk factors—appropriate evels of follow-up care	*Policy & system changes * Dyad lenses/focused care *Connection to community resources	*Optimization of patient referrals to specialty providers *Facilitate tele-health visits as a preferred method *Utilize technology to mprove screening, racking of long-term health and education	*Decision to be made with patient and provider *Establish a medical home for mom and baby dyad *Provide access to tele-health visits as needed

Encompasses all phases/subjects	
Objective 1	**Establish a multidisciplinary fourth trimester team**
Metric	Does the hospital/community system have a multidisciplinary fourth trimester team? Yes or No
Activity	dentify a physician leader responsible for the outcomes of the fourth trimester activities. Physician leader team (OB/MFM/Ped and NP/CNM)
Activity	dentify a nurse/Social worker/nurse navigator/case manager leader responsible for the daily operations and oversight of the fourth trimester activities.
Activity	dentify a community leader responsible for the coordination and connection to services from hospital to community
Activity	dentify additional team members to help with the success of the team, e.g., doula, population health, home visitor, alternative birth worker, community health worker, MCO representative, Nurse practitioner, Certified nurse midwife, pediatrician, family practice provider, faith leader etc.. team limited to 6-8
Activity	dentify a team member who is an expert in DEIB and cultural humility who can provide leadership and guidance on infusing this throughout the project.
Activity	dentify a team member with expertise in trauma-informed care who can provide leadership and guidance throughout the project.
Objective 2	**The multidisciplinary fourth trimester team will create a formal written project plan that engages senior leadership in efforts to improve maternal and infant health outcomes.**
Metric	Does the multidisciplinary fourth trimester team have a formal written project plan with senior leadership engagement? Yes or No
Activity	Identify a senior administrative leader to sponsor the fourth trimester team.
Activity	Identify a nursing leader/project manager to work to coordinate the fourth trimester activities.
Activity	Create a project charter that outlines the problem, the scope, the goals(s), and preliminary project plan.
Activity	Identify the frequency for staff training about maternal mental health screening, substance use screening, coordination and connection to services, education, and referrals for chronic conditions (hypertension, diabetes, cardiac conditions, obesity, etc.), trauma informed care and cultural humility.

Mental health conditions are the most common complication of pregnancy and childbirth, affecting at least 1 in 5 mothers or childbearing people (800,000 families) each year in the United States.

75% of women experiencing maternal mental health conditions do not get the care needed for recovery.

Individuals of color and individuals who live in low income neighborhoods are more likely to experience maternal mental health conditions and less likely to be able to access care.

The cost of not treating maternal mental health conditions is $32,000 per mother-infant pair totaling $14.2 billion nationally.

Suicide and overdose are the leading causes of death in the first year postpartum with 100% of these deaths deemed preventable.

Left untreated, these illnesses can have long-term negative impacts on parents, babies, families, and society.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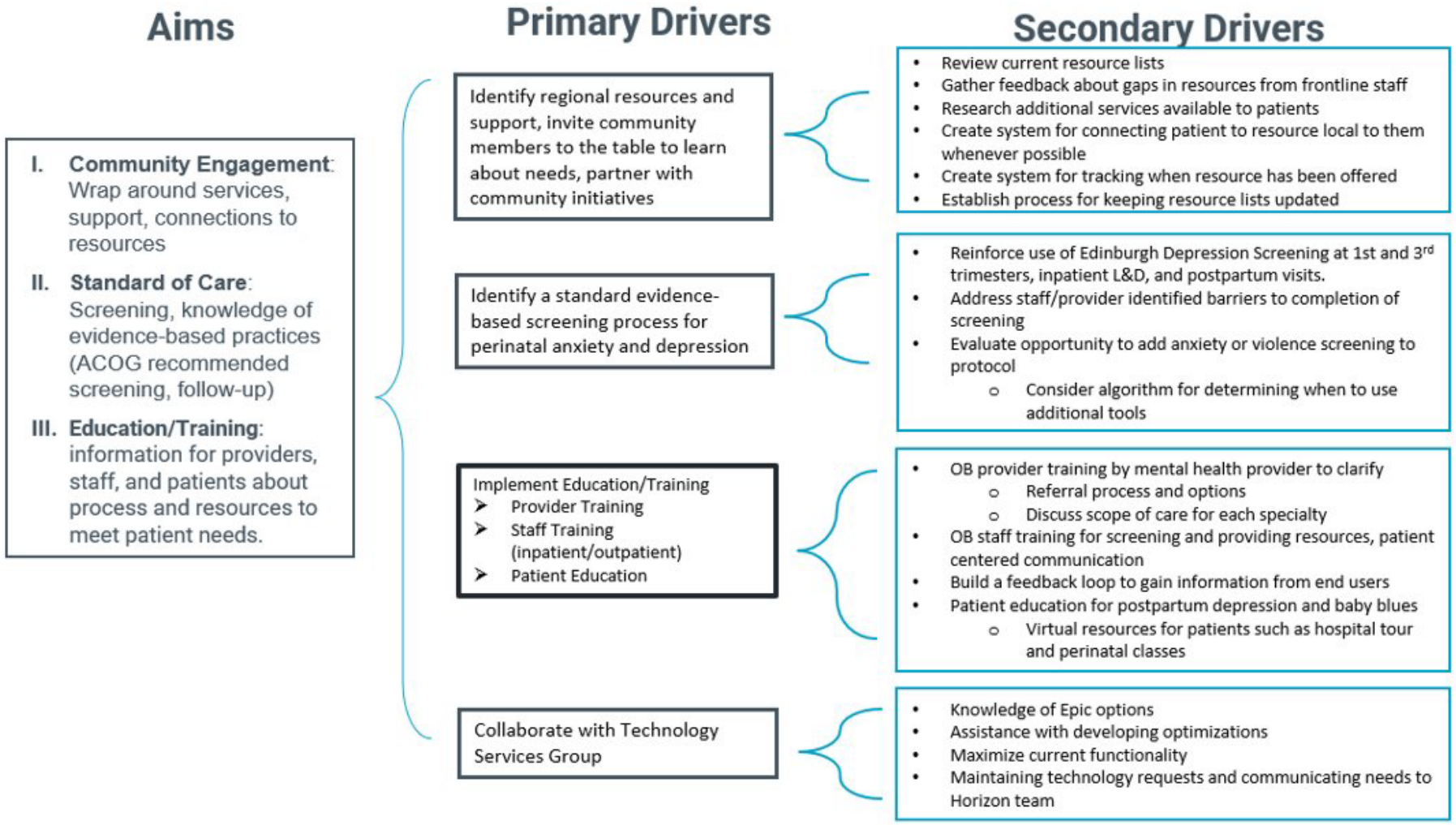
Driver Diagram



Project Charter

CARILION Women's
Quality & Patient Safety

Project Charter			
Project Name	Virginia's EMBRACE the 4th Initiative: Perinatal Mental Health Project		
Project Description	Improve perinatal mental health for patients		
Project Lead	Jane Colwell	**Project Sponsor**	Michelle Franklin
Goal Alignment	Maternal Mortality	**Date Approved**	3/12/2022

Business Case

After in-depth review of the VNPC EMBRACE initiative work plan, we have determined that there are process and clinical outcomes opportunities that can benefit Carilion Women's by enhancing perinatal mental health care screening, coordination, treatment, and referral. Work will include standardizing evidence based best practice techniques across the department and organization. Patient education materials will be developed to promote best practice and optimal prenatal, birth, and postpartum experience in collaboration Carilion Psychiatry and community partners.

Goals/Deliverables

- Identify regional resources and support, invite community members to the table to learn about needs, partner with community resources
- Identify a standard evidence-based screening process for perinatal anxiety and depression
- Implement education/training for providers, inpatient and outpatient staff, and patients
- Collaborate with Technology Services Group to leverage design of the electronic health record

Team Members

Name	Role
Sarah Dooley	Ambulatory Quality Lead
Isaiah Johnson	Physician Quality Lead
Elizabeth Rutrough	Ambulatory Operations Lead
Kristi Thomas	Data Analytics

Scope

- Carilion Women's services at Roanoke Memorial Hospital and New River Valley Hospital
- Carilion Women's ambulatory practices that provide OB care
- All pregnant and postpartum patients receiving care from Carilion Women's

Risks and Constraints

Failure to not move forward can have a potentially harmful impact on patient safety, and maternal/newborn outcomes. Negative patient experiences can impact reputation and result in reduced volumes as patients choose alternative birthing options and/or providers.

Milestones

- Resource lists developed
- Education plan for providers, staff, and patients
- Streamline screening processes

Measures

1. Percentage of pregnant patients screened for perinatal mental health in their first trimester using a valid tool
2. Percentage of pregnant patients screened for perinatal mental health in their third trimester using a valid tool
3. Percentage of patients screened for perinatal mental health within 8 weeks postpartum using a valid tool

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Sponsor Update

Date

March 14, 2023

Project Name

Virginia's EMBRACE the 4th, Maternal Mental Health project

Project Goals

Focus on maternal mental health components of VNPC's work plan:

- Strengthen pathways to maternal mental health and other SDOH resources
- Develop resources for providers to support OBGYN management of low and moderate risk patients
- Educate providers, staff, and patients about maternal mental health
- Increase consistency of perinatal Edinburgh Depression Screening

Completed Work

- PMADS training for OBGYN Rocky Mount
- Drafts of provider and patient handouts shared with pilot group for feedback
- Developed regional versions of community resource lists

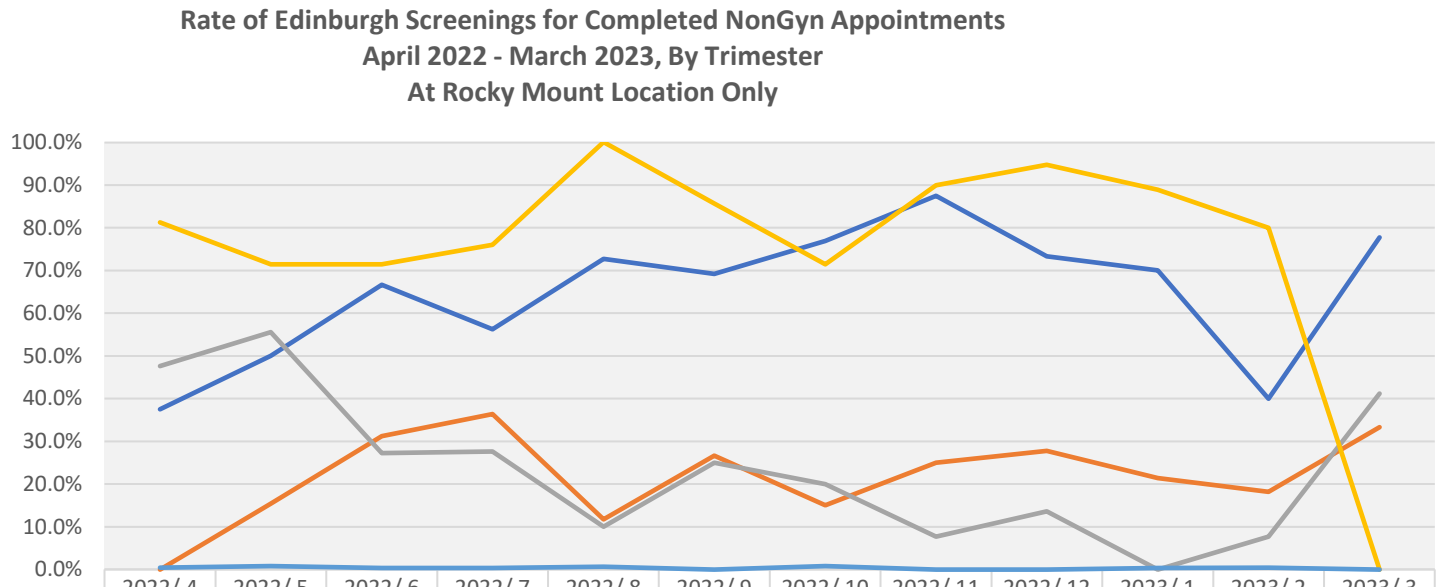
Next Steps

- Finalize provider and patient handouts
- Connect with Children's to discuss EPDS in MyChart
- Develop smart phrases to share

Issues/Concerns

- EPDS in peds visits not documented in mother's chart

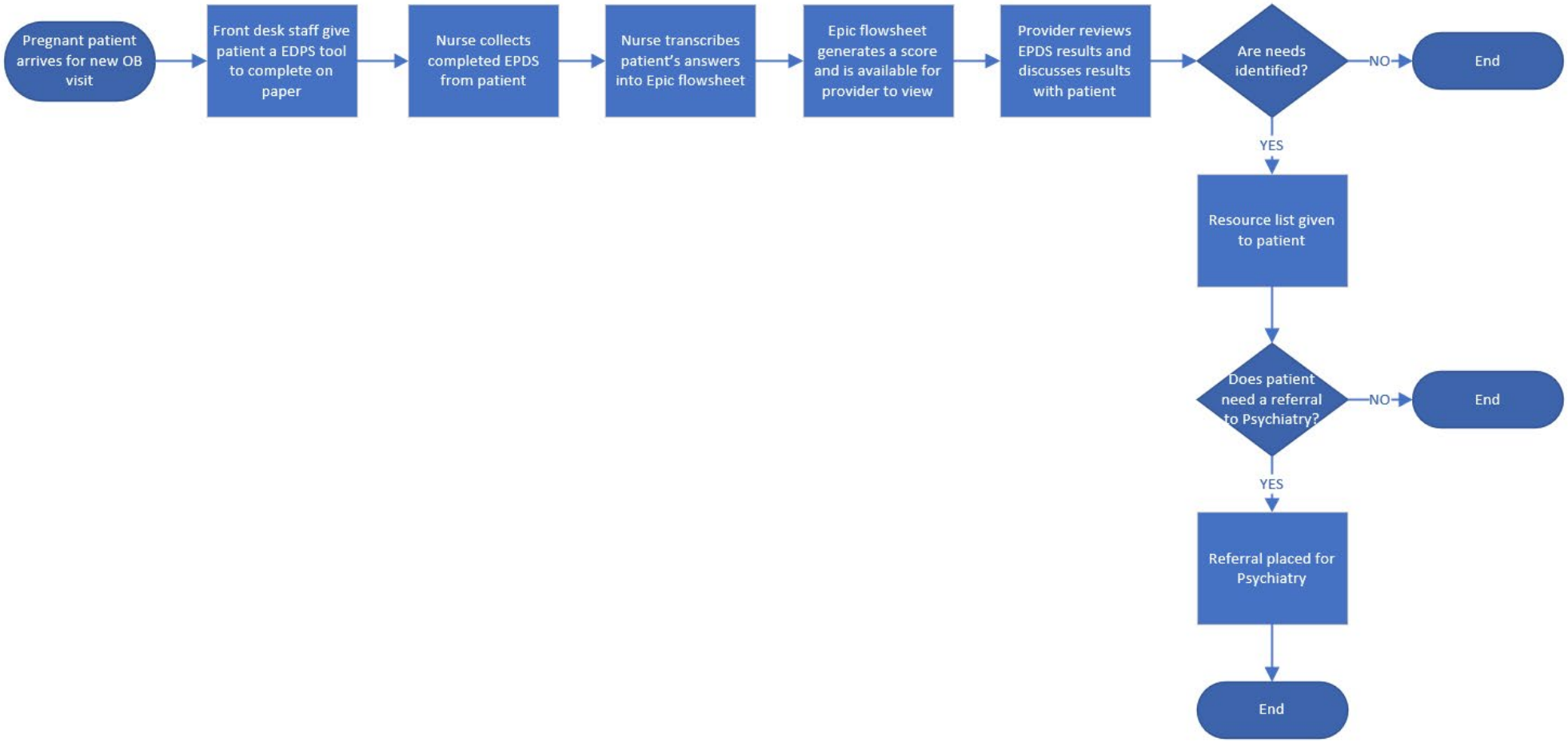
Performance metrics



	2022/ 4	2022/ 5	2022/ 6	2022/ 7	2022/ 8	2022/ 9	2022/ 10	2022/ 11	2022/ 12	2023/ 1	2023/ 2	2023/ 3
1st	37.5%	50.0%	66.7%	56.3%	72.7%	69.2%	76.9%	87.5%	73.3%	70.0%	40.0%	77.8%
2nd	0.0%	15.4%	31.3%	36.4%	11.8%	26.7%	15.0%	25.0%	27.8%	21.4%	18.2%	33.3%
3rd	47.6%	55.6%	27.3%	27.6%	10.0%	25.0%	20.0%	7.7%	13.6%	0.0%	7.7%	41.2%
PostPartum	81.3%	71.4%	71.4%	76.0%	100.1%	85.7%	71.4%	90.0%	94.7%	88.9%	80.0%	0.0%
PostPartum within 3 weeks	0.4%	0.8%	0.3%	0.4%	0.7%	0.0%	0.8%	0.0%	0.0%	0.4%	0.4%	0.0%

Delivery Yr/Month	Num or Den	*Trimester* 1st	2nd	3rd	PostPartum
2022/ 4	*Numerator*	6	0	10	13
	Denominator	16	17	21	16
2022/ 5	*Numerator*	6	2	10	10
	Denominator	12	13	18	14
2022/ 6	*Numerator*	10	5	6	15
	Denominator	15	16	22	21
2022/ 7	*Numerator*	9	8	8	19
	Denominator	16	22	29	25
2022/ 8	*Numerator*	8	2	2	20
	Denominator	11	17	20	18
2022/ 9	*Numerator*	9	4	4	12
	Denominator	13	15	16	14
2022/ 10	*Numerator*	10	3	4	10
	Denominator	13	20	20	14
2022/ 11	*Numerator*	7	2	1	9
	Denominator	8	8	13	10
2022/ 12	*Numerator*	11	5	3	18
	Denominator	15	18	22	19
2023/ 1	*Numerator*	7	3		16
	Denominator	10	14	19	18
2023/ 2	*Numerator*	2	2	1	4
	Denominator	5	11	13	5
2023/ 3	*Numerator*	7	4	7	0
	Denominator	9	12	17	5

Process Map


Pregnant patient arrives for new OB visit
Front desk staff give patient a EDPS tool to complete on paper
Nurse collects completed EPDS from patient
Nurse transcribes patient's answers into Epic flowsheet
Epic flowsheet generates a score and is available for provider to view
Provider reviews EPDS results and discusses results with patient
Are needs identified?
NO
End
YES
Resource list given to patient
Does patient need a referral to Psychiatry?
NO
End
YES
Referral placed for Psychiatry
End

Failure Modes Effects Analysis

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FMEA

Process Name: OBGYN Ambulatory Edinburgh Depression Screening										**Prepared By:** Sarah Dooley
Responsible: Jane Colwell										**FMEA Date:** 7/20/2022
Process Step	**Potential Failure Mode**	**Potential Failure Effects**	**SEVERITY (1-10)**	**Potential Causes**	**OCCURRENCE (1-10)**	**Current Controls**	**DETECTION (1-10)**	**RPN**	**Change Idea**	**Responsible Party**
1	Staff forgets to give pt EPDS	Pt not screened	5	Distraction, competing tasks	5	Morning review of schedule to check for new OB pts	5	125	Include EPDS with OB intake form, create ability for pt to complete both in myChart so they are automatically assigned together	Sarah
1	Pt gets EPDS but does not complete it	Pt not screened	5	Pt doing other paperwork, chooses not to do EPDS	2	Nurse asks pt for completed EPDS	10	100	Patient education to reinforce supportive care for mental health needs	Sarah
2	Nurse forgets to collect EPDS from patient	Screening not documented	5	Distractions, competing tasks	5	Provider checks for EPDS results in EMR	7	175	Staff education for PMADS and resource lists to equip staff	Jane
3	Nurse doesn't enter EPDS results into flowsheet	Screening not documented	5	Distractions, competing tasks	2	Provider checks for EPDS results in	7	70	Move flowsheet for EPDS into rooming navigator	Cherie

Project Planning

CARILION Women's Quality & Patient Safety

PROJECT PLANNING FORM

Project Name	Virginia's EMBRACE the 4th Initiative: Perinatal Mental Health Project		
Project Description	Improve perinatal mental health for patients		
Project Lead	Jane Colwell, RN	**Project Sponsor**	Michelle Franklin
Project Team	Sarah Dooley, RN; Jaclyn Nunziato, MD; Jen Wells, MD; Elizabeth Rutrough, Kristi Thomas		

Driver	Process Measure	Goal
1. Identify regional resources and partner with community initiatives	Number of sources consulted to gather information for the list	Develop community resource lists for patients organized by region
2. Identify a standard evidence-based screening process for perinatal mental health	Level of collaboration and consultation with internal and external stakeholders for identification of best evidence-based screening process for perinatal mental health	Develop a standard evidence-based process for perinatal mental health screening in Carilion Women's
3. Implement training/education for providers, staff, and patients	Number of providers and staff who complete perinatal mental health training/education	Increase confidence level of the clinical team to care for perinatal mental health needs
4. Collaborate with technology services group	Level of accessibility and usability of EPDS screening	Make EPDS information easy for providers and staff to find

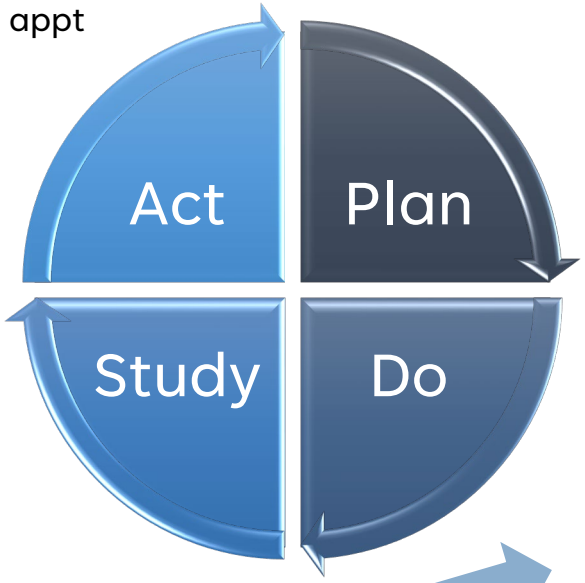
Driver Number (from above)	Change Idea	PDSA	Person Responsible	Timeline
2	Include EPDS with OB intake form, create ability for pt to complete both in myChart so they are automatically assigned together	P: Keep screening tool with other required paperwork D: Re-organize front office supplies to bundle new OB forms S: Monitor new OB visit completion of EPDS rate A: Gather feedback from clinic staff	Sarah Dooley	June 2022
3	Patient education to reinforce supportive care for mental health needs	P: Develop a PMADs handout for new OB patient education D: Gather information, write, and format handout S: Gather feedback from stakeholder experts A: Revise document with recommended changes	Dr. Nunziato	August-October 2022
3	Staff education for PMADS and resource lists to equip staff	P: Find training opportunity to increase staff knowledge about PMADs D: Two 2-hour sessions with Postpartum Support VA experts	Sarah Dooley	September-October 2022

PDSA

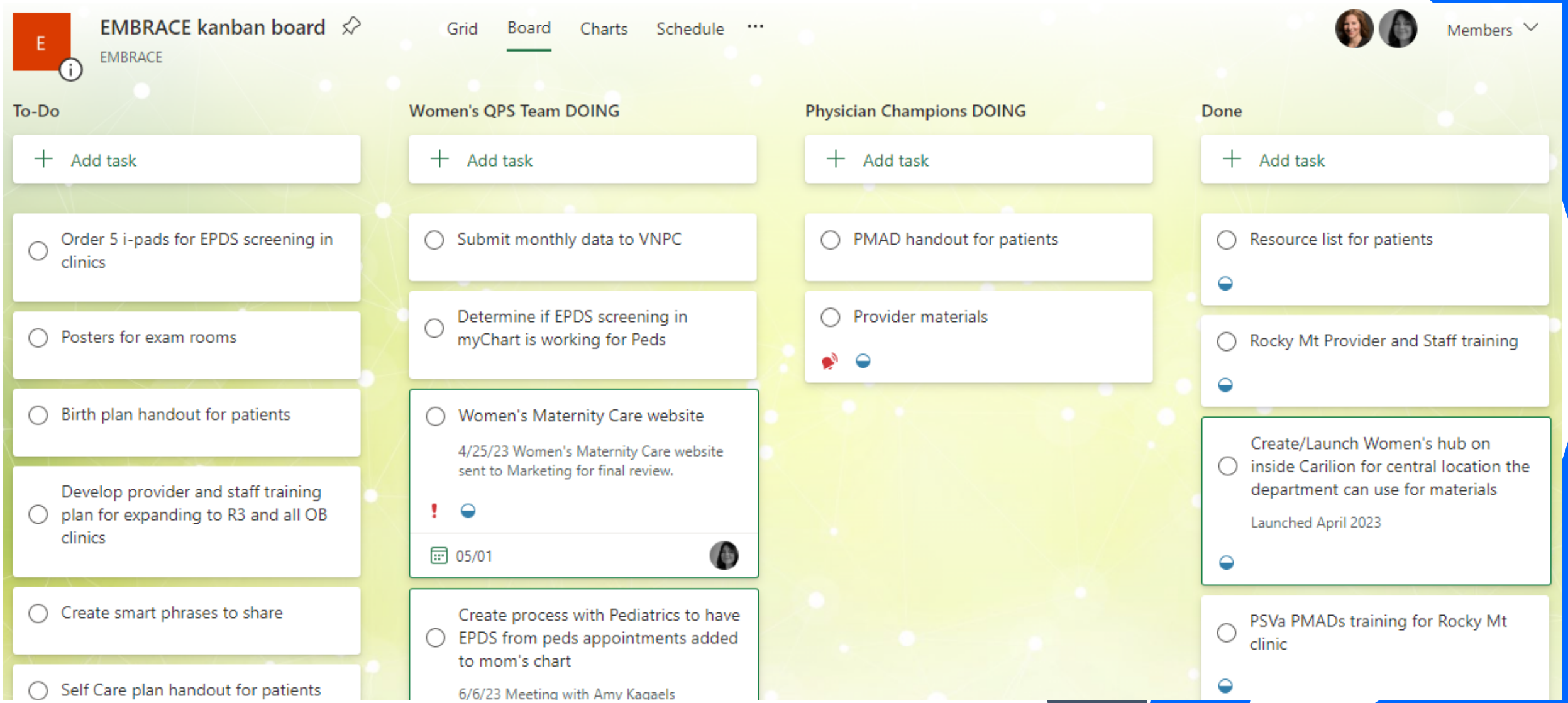
Cycle 1:
- Give patient EPDS screening with new OB papers

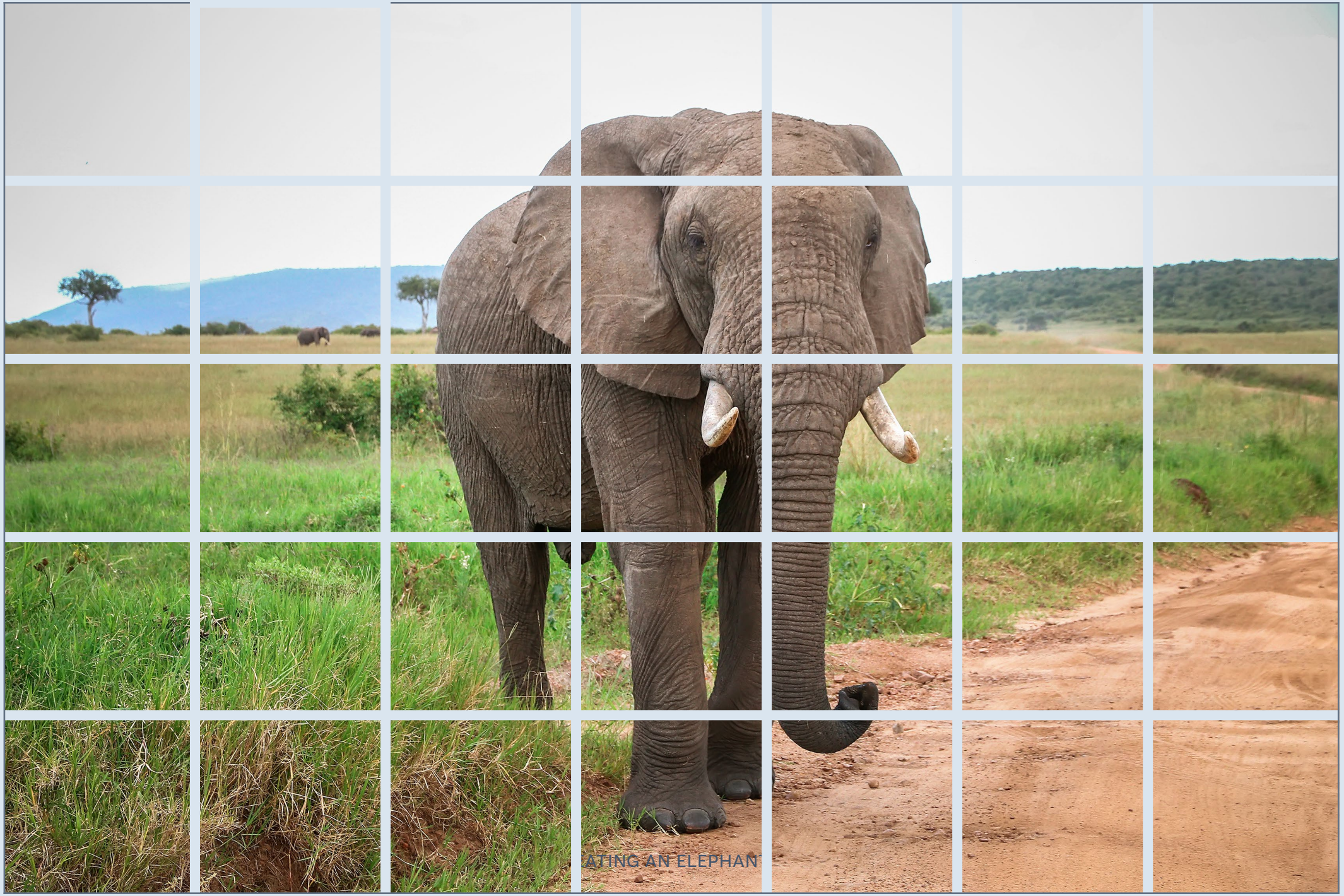
Cycle 2:
- Co-locate EPDS form with new OB papers

Cycle 3:
- Assign EPDS to patient in MyChart upon arrival to new OB appt



Kanban board

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Questions?

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