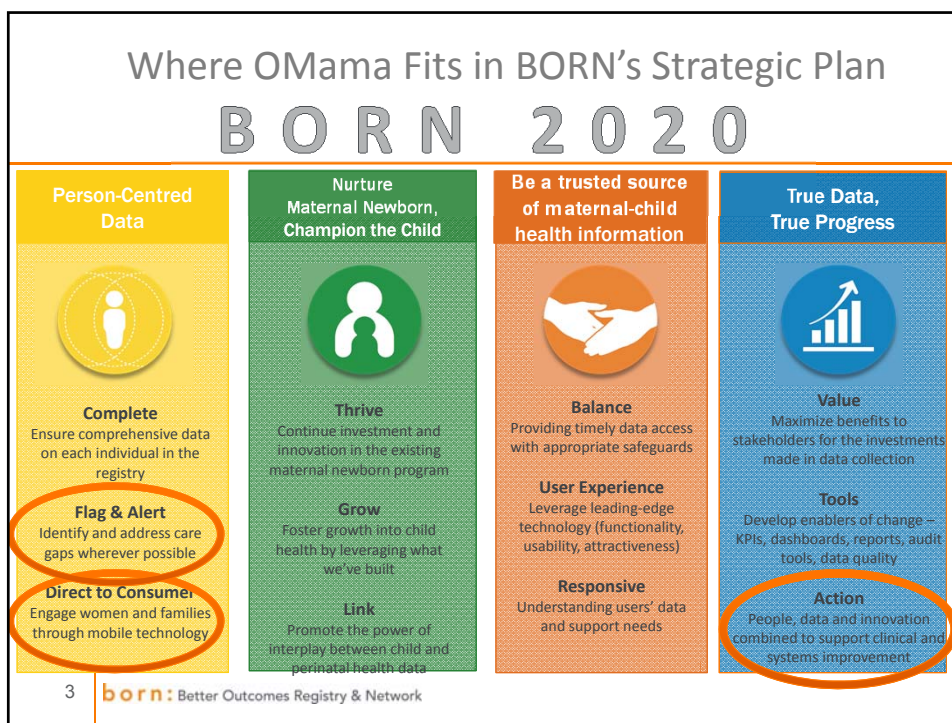**b o r n** Ontario | Early health. Lifelong health.
Début en santé. Longue vie en santé.

OMama

**OMama Project
Innovation in Mobile Health for
Maternity Care**

February 17, 2016
Best Start Conference, Toronto

Agenda

Intro to the OMama Project

BORN's Mobile Health Strategy and OMama

eHealth Innovation and OMama

Keeping Women at the Centre of the Project

Next Steps

2 | **b o r n:** Better Outcomes Registry & Network

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Where OMama Fits in BORN's Strategic Plan

BORN 2020

Person-Centred Data	Nurture Maternal Newborn, Champion the Child	Be a trusted source of maternal-child health information	True Data, True Progress
Complete Ensure comprehensive data on each individual in the registry	**Thrive** Continue investment and innovation in the existing maternal newborn program	**Balance** Providing timely data access with appropriate safeguards	**Value** Maximize benefits to stakeholders for the investments made in data collection
Flag & Alert Identify and address care gaps wherever possible	**Grow** Foster growth into child health by leveraging what we've built	**User Experience** Leverage leading-edge technology (functionality, usability, attractiveness)	**Tools** Develop enablers of change – KPIs, dashboards, reports, audit tools, data quality
Direct to Consumer Engage women and families through mobile technology	**Link** Promote the power of interplay between child and perinatal health data	**Responsive** Understanding users' data and support needs	**Action** People, data and innovation combined to support clinical and systems improvement

3 **born:** Better Outcomes Registry & Network

Advisory Committee

Ann Sprague	Kristi Adamo
Carla Sorbara	Mari Teitelbaum
Claudia Steffler	Marisa Cicero
Debra Boyce	Matthuschka Sheedy
Courtney Green	Sandra Dunn
Jennifer Milburn	Edith Ho
Nicole Robinson	Vinna Vong

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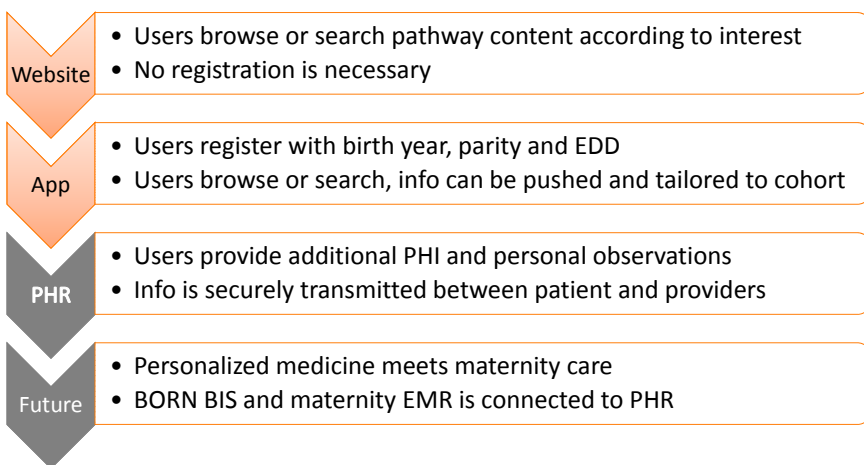
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OMama our own words….

- Listen to Women
- Build a website
- Build an app
- Define a PHR
- Test and Evaluate
- Publish Results
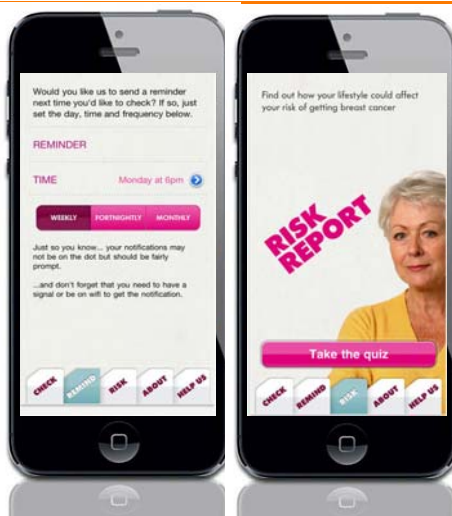
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E-Health Innovation:
OMama's plans for now and into the future….

Website
- Users browse or search pathway content according to interest
- No registration is necessary

App
- Users register with birth year, parity and EDD
- Users browse or search, info can be pushed and tailored to cohort

PHR
- Users provide additional PHI and personal observations
- Info is securely transmitted between patient and providers

Future
- Personalized medicine meets maternity care
- BORN BIS and maternity EMR is connected to PHR

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Some of the apps that informed OMama… iBreastcheck

iBreastCheck

- Video demonstrating how women can screen for breast cancer
- Run risk reports
- Set reminders to check at a schedule of the users choosing

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<30 Days – Heart and Stroke

<30 Days

- Guides users to break bad habits and adopt a healthier lifestyle in 30 days or less.
- Evidence-based and consumer survey derived heart health promotion app

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Patient Passport

Dr. H. Bliss Murphy Cancer
Centre – St. John's

Patient Passport

• Developed by the Dr. H. Bliss Murphy Cancer Centre
• Helps to
  • Track symptoms
  • Keep a journal
  • Organize medications
  • Find information
  • Keep track of appointments
  • Search for local cancer care providers in Newfoundland and Labrador

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Secure Patient–Provider Communication Tools

Your online door to your doctor's office.

Your doctor has selected ____ so you can access your medical records anytime, anywhere, manage your office appointments, talk privately to your care team, and receive the best care possible.

At your convenience
• View your health record from any internet-enabled device
• Exchange secure messages with your healthcare provider
• Request and manage appointments

Anytime access
• Lab orders
• Test results
• Upcoming appointments

By invitation
• EHR • Secure communication with healthcare provider • Providers can broadcast news and send reminders • Healthcare providers and patients can share test results, treatment plans, and other information • Refill prescriptions

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Mapping content for women (simplified)

Maternal Pregnancy Pathway

Choosing a
Healthcare provider

Morning
sickness
First fetal
movement

Diabetes
Screening

Plan Labour
& Birth

(conception)   Provider Pregnancy Care Reminders   (Delivery)

Missed
period

Prenatal
Screening

18-week
ultrasound

Prenatal
classes

'Kick counts'

Post-partum
experiences

Changes to
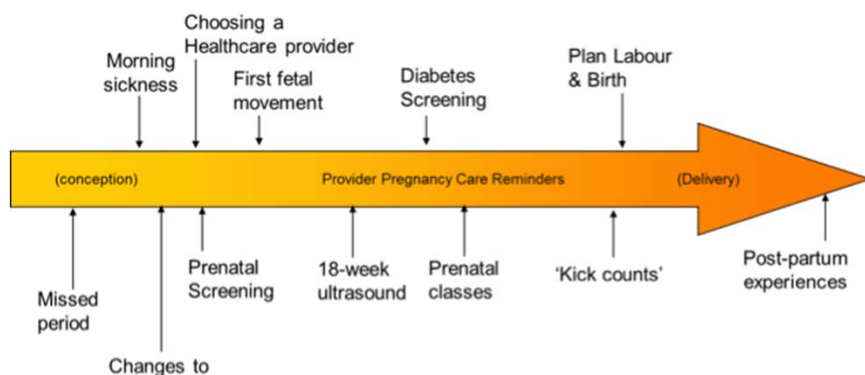
11 | **b o r n :** Better Outcomes Registry & Network

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Mapping content for providers (simplified)

Provider Pregnancy Pathway

Antenatal
1&2 start
Prenatal
Education

Diabetes
Screening

Plan Labour
& Birth
GBS
Screening

(conception)   Provider Pregnancy Care Reminders   (Delivery)

LMP
Prenatal
Screening
Dating
Ultrasound

Transmit Antenatal
Forms to Hospital

Newborn Screening
within 48 hours
of birth

Rhogam for
Rh(-) women
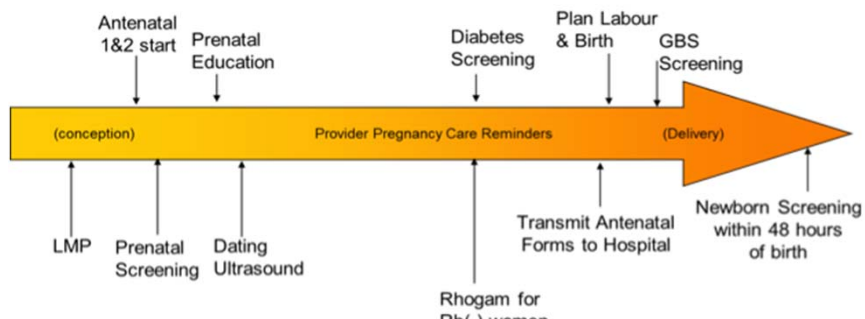
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Choosing OMama's Content Priorities
Women's Priorities Survey

Women's Priorities Survey at:

- http://facebook.com/OMama Project
- http://surveymonkey.com/s/O Mama
- Over 1,100 women and maternity care providers responded

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**Survey Analysis
Preconception (example)**

Q10 Of the below subject areas related to PRECONCEPTION (the time before pregnancy), what are the 5 most important subjects you think the OMama Website and App should offer women?
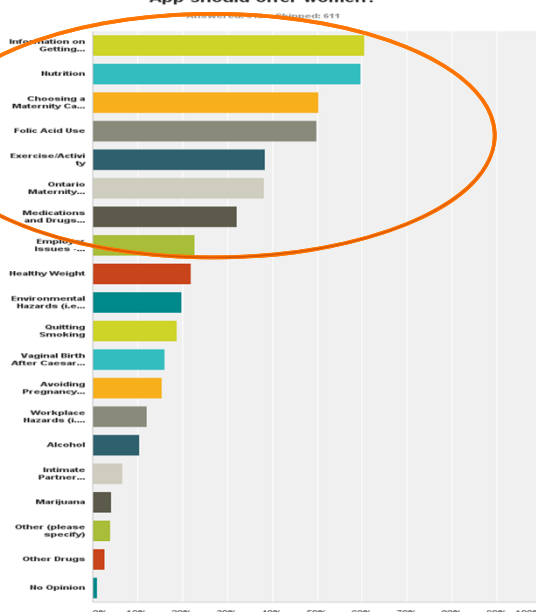
14 | **b o r n :** Better Outcomes Registry

The OMama 1.0 Site Map

Pre-pregnancy	Early Pregnancy	Mid Pregnancy	Late Pregnancy	Labour & Birth	Postpartum	Newborn

• **Planning for Pregnancy**
  ○ Getting Pregnant
  ○ Child Spacing
• **Folic Acid Supplement**
• **Medications, Drugs and Complementary Therapies**
  ○ Medications
  ○ Alcohol Use
  ○ Tobacco Use
  ○ Other Drugs
  ○ Herbs and Homeopathy
  ○ Acupuncture
• **Healthy Living**
  ○ Nutrition
  ○ Exercise and Activity
  ○ Healthy Weight
  ○ Mental Health
  ○ Oral Health
• **Healthy Environment**
  ○ Workplace Hazards
  ○ Environmental Hazards
• **Violence and Abuse**
• **Vaginal Birth after Caesarean (VBAC)**
• **Choosing a Maternity Care Provider**
• **Choice of Birthplace**
  ○ Hospital birth
  ○ Home birth
  ○ Birth Centre
• **Immunization**
• **Parental Leave and Family Benefits**
  ○ Ontario Maternity Benefits Program
  ○ Social Programs
  ○ Family Resources
	• **Choosing a Maternity Care Provider** *[Pre-pregnancy]*
	• **Prenatal Care**
	  ○ Prenatal Tests *[incl.UTI, HIV]*
	  ○ Prenatal Screening and Testing, *incl. Genetic Screening, Amnio, U/S, NIPT]*
	  ○ Ultrasound
	    ○ dating
	    ○ anatomic
	    ○ sex identification
	    ○ post dates
	• **Pregnancy Options**
	  ○ Abortion
	  ○ Adoption
	• **Miscarriage**
	• **Healthy Living**
	  ○ Nutrition *[Pre-pregnancy]*
	  ○ Iron and Vitamins
	  ○ Folic Acid Supplement *[Pre-pregnancy]*
	  ○ Exercise and Activity *[Pre-pregnancy]*
	  ○ Healthy Weight
	  ○ Mental Health *[Pre-pregnancy]*
	• **Medications, Drugs and Complementary Therapies** *[Pre-Pregnancy]*
	• **Discomforts of Early Pregnancy**
	  ○ Nausea and Vomiting
	  ○ Fatigue
	  ○ Cramping
	• **Parental Leave and Family Benefits** *[Pre-Pregnancy]*
	• **Healthy Relationships**
	  ○ Sex and Pregnancy
	  ○ Violence and Abuse *[Pre-pregnancy]*
	• **Choice of Birthplace** *[Pre-pregnancy]*
		• **Prenatal Care** *[Early Pregnancy]*
		• **Fetal Kick Counting**
		• **Healthy Living**
		  ○ Nutrition*[Pre-pregnancy]*
		  ○ Iron and Vitamins
		  ○ Exercise and Activity*[Pre-pregnancy]*
		  ○ Healthy Weight
		  ○ Pelvic Floor Health
		  ○ Mental Health *[Pre-pregnancy]*
		• **Prenatal Classes**
		• **Discomforts of Mid Pregnancy**
		  ○ Varicose Veins
		  ○ Aches and Pains
		  ○ Nausea and Vomiting *[Early Pregnancy]*
		  ○ Fatigue and Sleep
		• **Complications of Pregnancy**
		  ○ Gestational Diabetes
		  ○ Hypertension
		  ○ Preterm Labour
		• **Choice of Birthplace** *[Pre-pregnancy]*
		• **Immunization** *[Pre-pregnancy]*
		• **Cord Blood Banking**
			• **Fetal Kick Counting** *[Mid Pregnancy]*
			• **GBS Screening**
			• **Signs of Labour**
			• **Planning for Labour and Birth**
			  ○ Choice of Birthplace *[Pre-pregnancy]*
			  ○ Making a Birth Plan
			  ○ Hospital Tour
			  ○ What to pack/prepare
			  ○ Eating and Drinking
			  ○ Labour Support
			  ○ Pain Relief in Labour
			  ○ Birth Positions
			  ○ Breech Birth
			  ○ Going Past your Due Date
			  ○ Moving into Hospital
			  ○ Waterbirth
			  ○ Cord Clamping
			  ○ Placenta
			  ○ Breastfeeding Prep
			• **Signs of Labour**
			• **When to call your maternity care provider**
			• **Discomforts of Later Pregnancy**
			  ○ Aches and Pains *[Mid Pregnancy]*
			  ○ Fatigue and Sleep *[Mid Pregnancy]*
			• **Complications of Pregnancy** *[Mid Pregnancy]*
			• **Parental Leave and Family Benefits** *[Pre-pregnancy]*
			• **Newborn Healthcare**
			  ○ Newborn Exam
			  ○ Vitamin K Injection
			  ○ Birth Weight
			  ○ Eye Treatment
			  ○ Cord Blood Banking *[Mid Pregnancy]*
			  ○ Newborn Screening
			  ○ Hearing Screening
			  ○ Newborn Checkups
			• **Healthy Living**
			  ○ Nutrition *[Pre-pregnancy]*
			  ○ Exercise and Activity *[Pre-pregnancy]*
			  ○ Healthy Weight
			  ○ Pelvic Floor Health *[Mid Pregnancy > Healthy Living]*
			  ○ Mental Health *[Pre-pregnancy]*
				• **Planning for Labour and Birth** *[Late Pregnancy]*
				• **Signs of Labour** *[Late Pregnancy]*
				• **Early/Latent/False Labour**
				• **When to call your maternity care provider** *[Late Pregnancy]*
				• **My Baby at Birth**
				  ○ Skin to Skin Contact
				  ○ Breastfeeding
				• **Newborn Healthcare** *[Late Pregnancy]*
				• **Newborn Complications**
				  ○ The Unexpected Ill/Hospitalized Infant (NICU experience)
				  ○ Infections
				  ○ Dehydration
				  ○ Jaundice
				  ○ Bereavement
				• **Variations of Labour and Birth**
				  ○ Premature Rupture of Membranes
				  ○ Meconium
				  ○ Induction of Labour *[Late Pregnancy]*
				  ○ Speeding up labour
				  ○ Intermittent and Continuous Fetal Monitoring
				  ○ Forceps and Vacuum
				  ○ Caesarean Section
				  ○ Breech Birth *[Late Pregnancy]*
				  ○ Episiotomy
				  ○ Newborn Resuscitation
					• **Postpartum Recovery**
					  ○ Vaginal Discharge/Bleeding
					  ○ Breast Care *[engorgement, sore nipples]*
					  ○ Wound Care *[episiotomy, tear]*
					  ○ Caesarean Recovery
					  ○ Going home from hospital (including car seats)
					• **Healthy Living**
					  ○ Nutrition
					  ○ Healthy Sleeping
					  ○ Mental Health Support
					  ○ Sex postpartum
					  ○ Contraception
					• **Postpartum Complications**
					  ○ Infection
					  ○ Haemorrhage
					  ○ Postpartum Depression
					  ○ Haemorrhoids
					  ○ Constipation
						• **Breastfeeding**
						  ○ Breast Milk Storage
						  ○ Alternatives to Breast Milk
						  ○ Weaning
						• **Being a Newborn**
						  ○ Breathing
						  ○ Sleeping (baby sleeping patterns)
						  ○ Eating
						  ○ Head
						  ○ Urine and Stool
						  ○ Jaundice
						  ○ Cradle Cap
						  ○ Dry Skin
						  ○ Crying and Colic
						• **Newborn Healthcare** *[Late Pregnancy]*
						• **Caring for my New Baby**
						  ○ How to Diaper a Baby
						  ○ Cord Care
						  ○ Swaddling and Wrapping Baby
						  ○ Car Seats
						  ○ Bathing
						  ○ Baby Equipment
						  ○ Circumcision
						  ○ Healthy Sleeping (including Mom and SIDS) *[Postpartum]*
						• **Immunization**
						• **Being a New Parent**
						  ○ Breastfeeding
						  ○ Mental Health Supports
						• **Birth Registration**
						• **Parental Leave and Family Benefits** *[Pre-pregnancy]*

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Pregnancy Pathway Content Collection: Where we're at…

Environmental Scan → Choose Milestones → Plot Info on Pathways → Evidence Appraisal → Content set for V 1.0
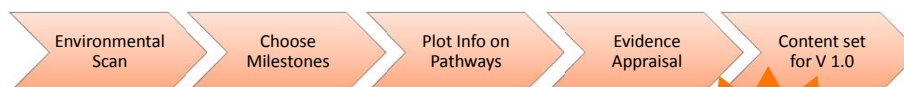
COMPLETE

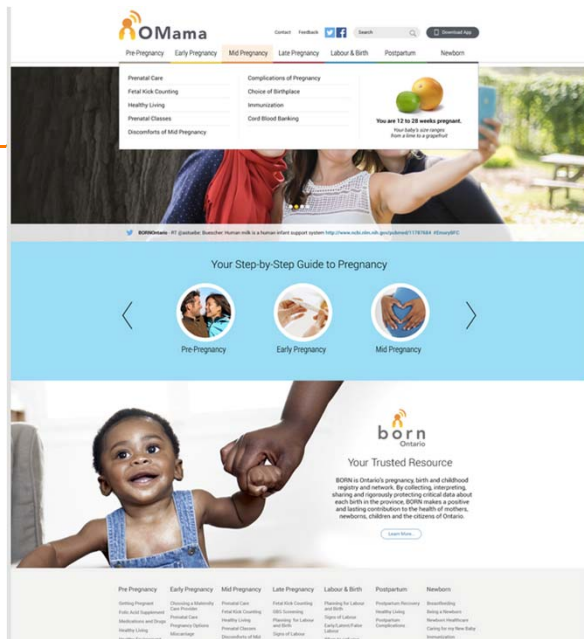16 **b o r n :** Better Outcomes Registry & Network   OMama

Ongoing Content Considerations

- Over 150 Milestones
- Variable quality of content, some big gaps
- Literacy levels
- Evidence base
- Appropriateness for Ontario women
- Language, culture, ethnicity
- Ownership
- Currency
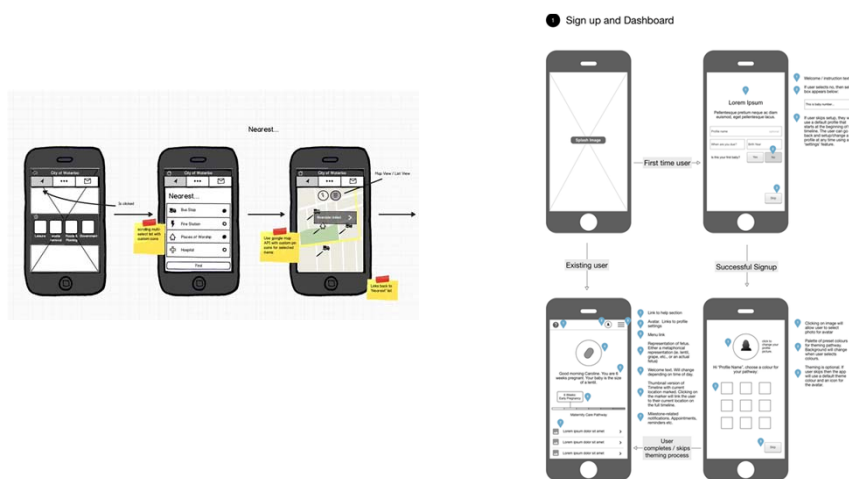- Collaboration needed on upcoming content project

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Home Page

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OMama
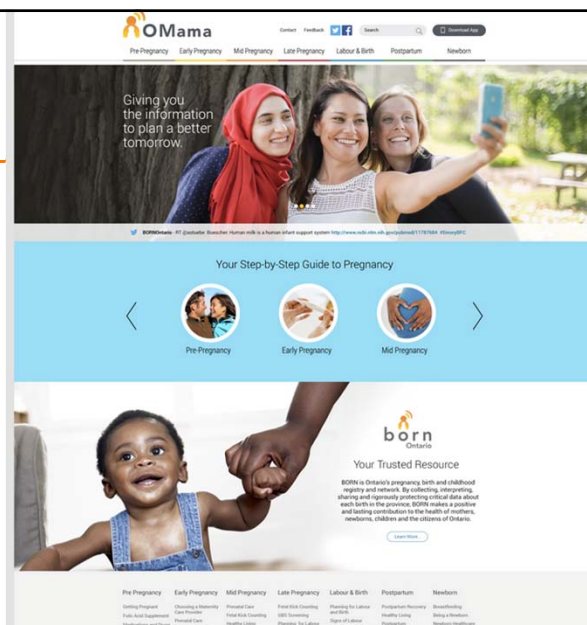
Drop Down

19 | **b o r n :** Better Outcomes Registry & Network

Interior Page

20 | **b o r n :** Better Outcomes Registry & Network

Architecture – Wireframe Process

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Splash Page
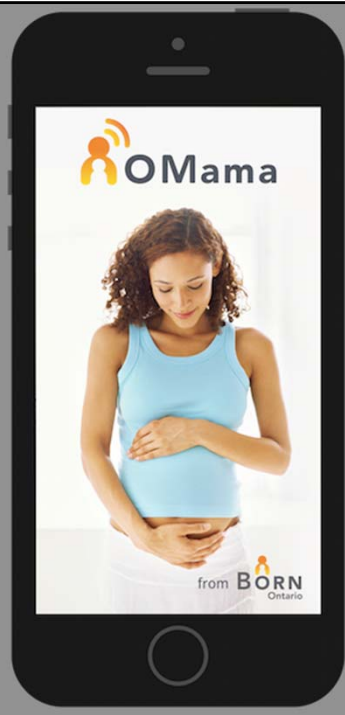
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Main Menu

b o r n : Better Outcomes Registry & Network
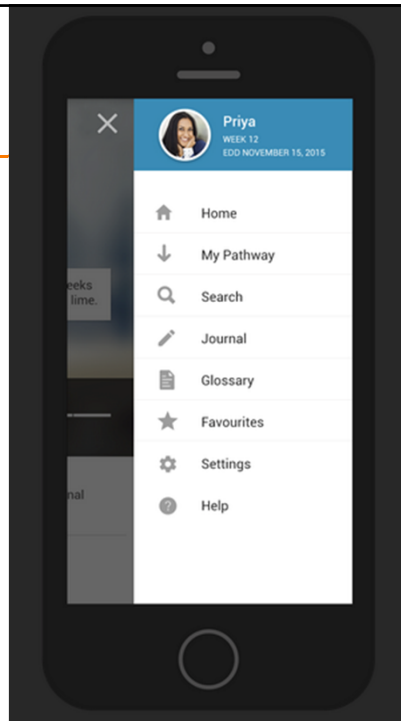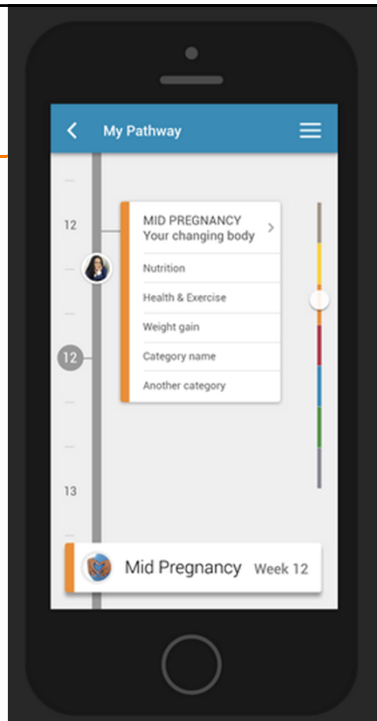
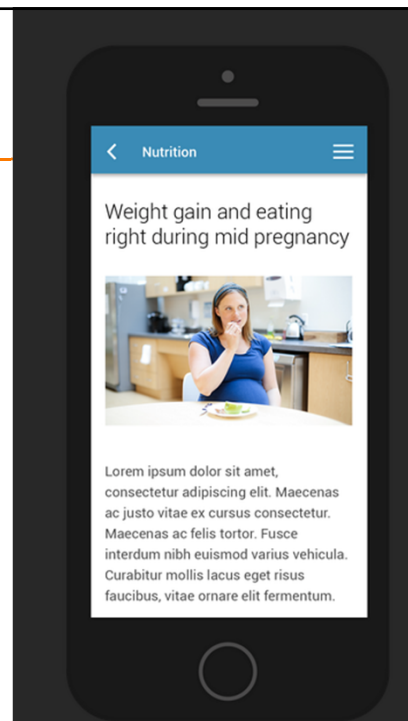# Home Page

b o r n : Better Outcomes Registry & Network
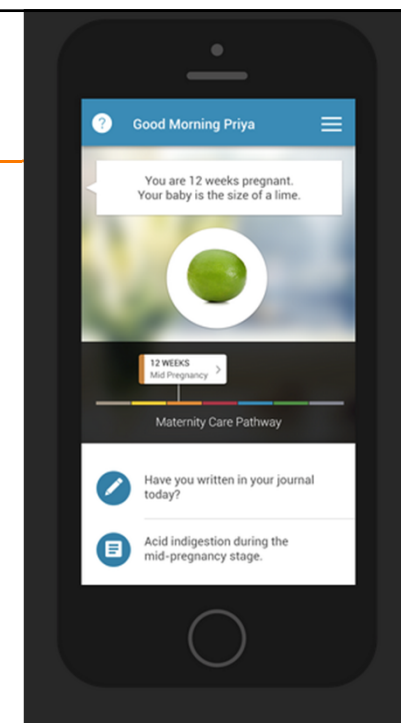
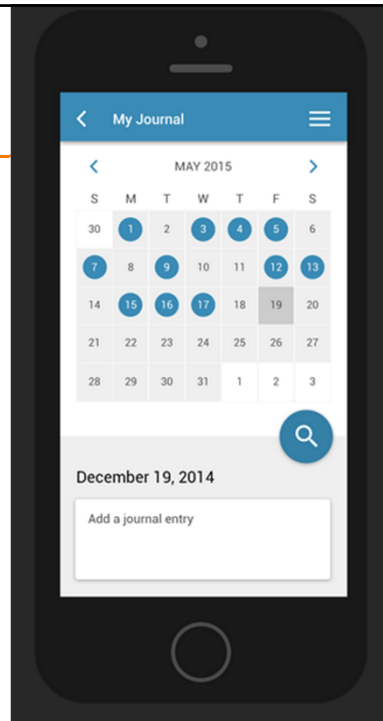# My Pathway

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Content Page

b o r n: Better Outcomes Registry & Network
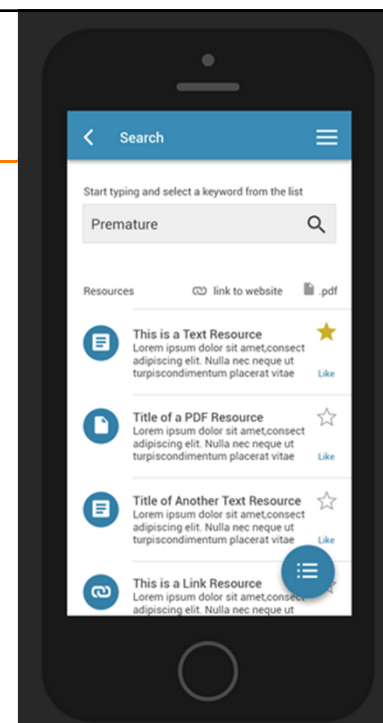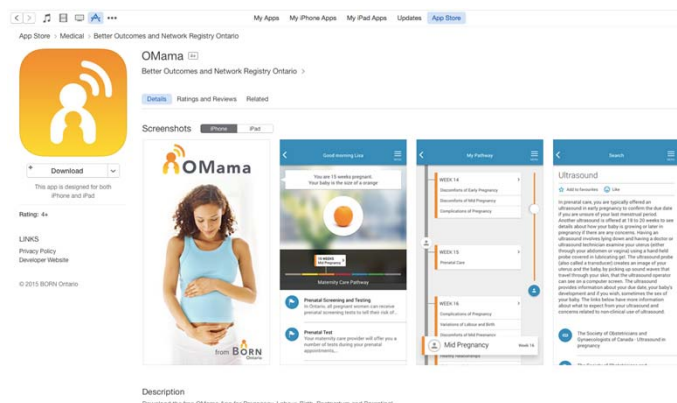
My Journal

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Search Page

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Website and App

- Website: www.omama.com
- OMama available in Android and IOS App Stores

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Next Steps

- Working with Stakeholders to Promote OMama since December 2015 Launch
- Developing Recommendations for Personal Health Record
- Evaluating and Reporting in 2016
- Partnering for sustainability/expansion
- Keep Innovating!

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Stay in touch with us!

If you have questions or would like to be involved, please contact:
Wendy Katherine, RM (Ret), MBA
Project Director
omamaproject@gmail.com

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