



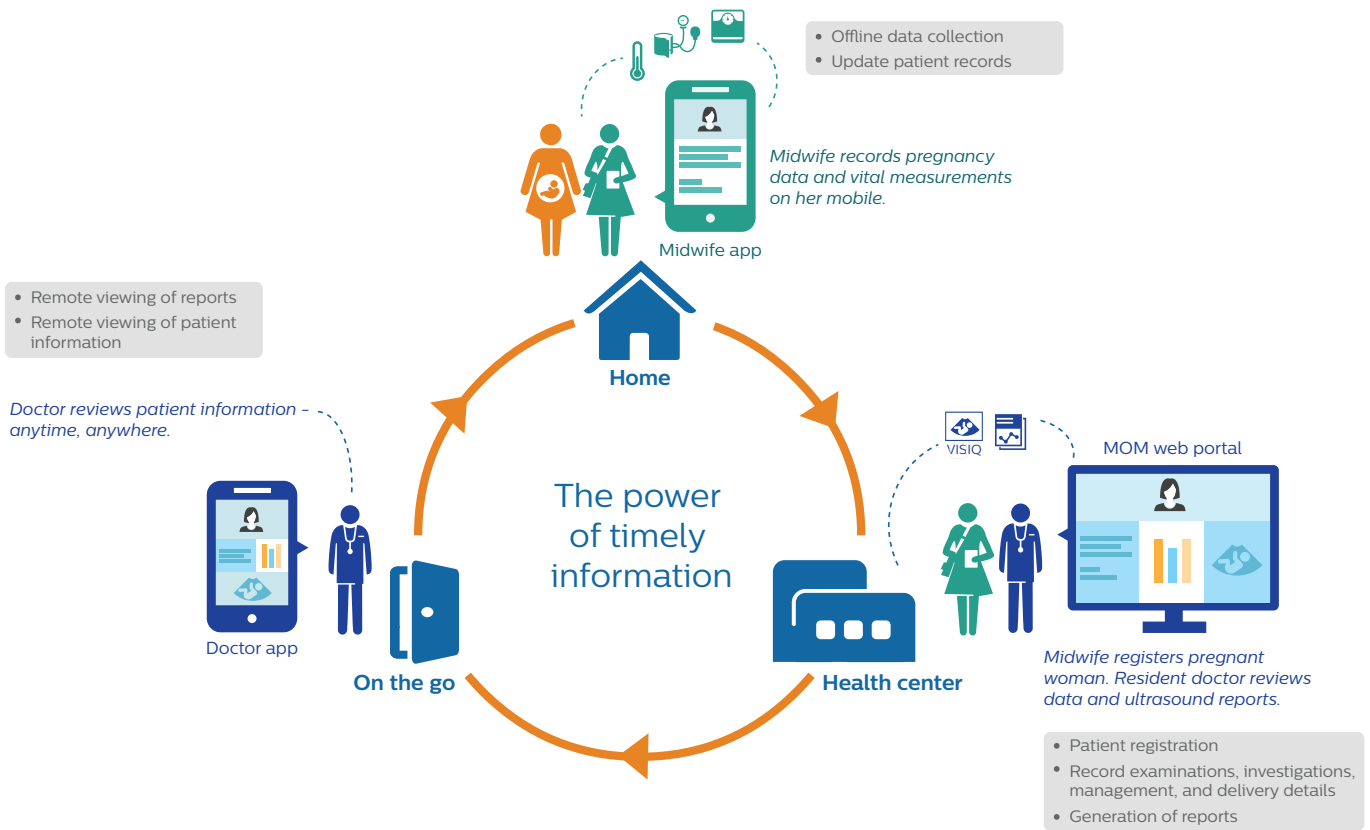
**PHILIPS**

Mobile Obstetrics  
Monitoring (MOM)

# Maternal monitoring, where and when **it matters**

Providing expectant mothers with enhanced care to address maternal mortality is a top priority for many communities. Philips Mobile Obstetrics Monitoring (MOM) is a software solution that helps unite information and action to identify and manage a high-risk pregnancy by bringing care to where it's urgently needed: primary health centers and patient homes. MOM empowers community caregivers to capture vital information during home visits, enabling antenatal risk stratification, diagnostic assistance, and progress assessment through mobile applications.

# The power of timely information



**MOM software solution includes MOM web app, MOM midwife app, and MOM doctor app.**

## Connecting home to health center

MOM allows community caregivers and physicians to jointly review and manage each case to provide timely referral of the patient to an appropriate healthcare center for further management if needed.

## Enhanced outcomes

*Provide early, focused detection and monitoring*

- Comprehensive digital patient records allow for early detection of high-risk pregnancies
- Protocol-based care delivery enhances patient outcomes
- Smarter utilization of clinician's time by focusing on high-risk pregnancies

## Improved access


*Expand access to care*

- Facilitates care at patient's home through data collection via midwife app
- Mobile app allows doctor to review patient information on the go
- Encourages institutional deliveries through more proactive patient engagement

## Efficient workflow

*Enhance patient management*

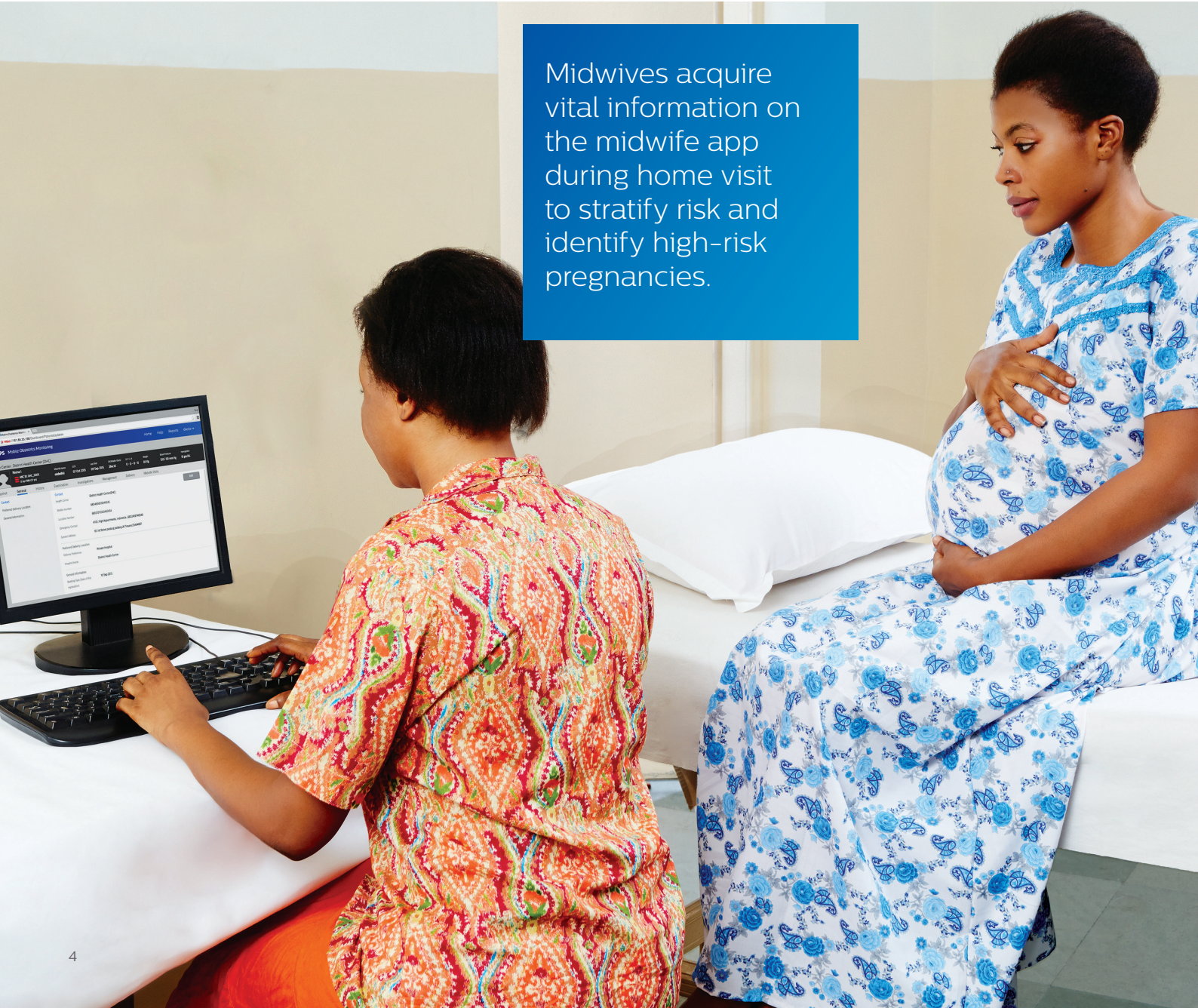
- Easy integration of ultrasound images and other laboratory reports
- Digital patient records allow for a paperless workflow
- One-touch generation of management reports to track progress on key indicators



Convenient dashboard allows clinicians to focus on monitoring high-risk pregnancies.

# MOM unites information and action

Intuitive workflows make it easy for midwives and clinicians to use MOM to work together to enhance care during a pregnancy.



Midwives acquire vital information on the midwife app during home visit to stratify risk and identify high-risk pregnancies.



Midwife enters vitals information collected at patient's home.



Doctor app allows clinicians to review patient information and images on the go.

## Key features

### Register patients

- General and demographic information
- Medical and obstetrics history

### Add examination details

- Pregnancy details such as fetus number, fetal movement, surgical events
- Complaints, including vomiting, pain, swelling, bleeding
- General/systemic/abdominal examination, such as weight, BP, fetal heart rate

### Integrate exams and other clinical data

- Upload ultrasound/fetal/other reports (PDF/JPEG)
- Integration of Philips VISIQ ultrasound with MOM

### Enhance management

- Record diagnosis and prescribe medication and nutrient supplements

### Track delivery details

- Delivery outcome, time and mode of delivery, fetus number

### Collect data and sync to server with the midwife app

- USB or SMS sync

### Remotely view patient information and reports using the doctor app

### Generate management reports

- Includes maternal deaths, HIV, malaria, complications

# Right **time**, right **place**



## Case study MOM pilot in Padang, West Sumatra, Indonesia, 2014\*





### Key challenge: high MMR

- MMR in Indonesia: 190/100,000 live births
- The **World Health Organization** states that pregnancy-related deaths can be avoided with better access to antenatal care



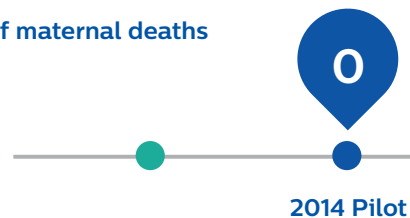
The MOM pilot monitored **656 women for one year** in Padang and delivered positive results; rewarded by **Frost & Sullivan Excellence Award** in 2015.

### Key interventions

-  MOM software solution
-  Antenatal ultrasound
-  Team of clinicians to manage care – midwives and doctors
-  Careworker kit to capture vitals during home visits

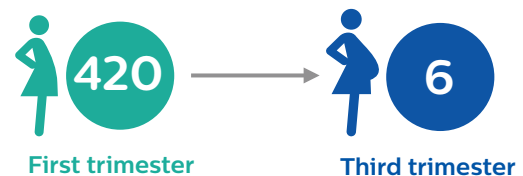
### Key results

#### Number of maternal deaths



**Zero maternal deaths** during the 2014 pilot thanks to identification, timely referral, and management using the MOM solution.

#### Patients having mild to severe anemia



**99% reduction in anemia** from first to third trimester through enhanced patient management.

#### Detection of very-high-risk pregnancies



**3X increase in detection of very-high-risk pregnancies** during the pilot.

\* Reference MOM Pilot Study White Paper

# Technical specifications

## Server requirements

- MOM server with following configuration:
  - Processor: Intel i5 Quad Core 3.6 GHz, 64-bit
  - 16 GB RAM DDR3
  - Hard drive: 1 TB
  - 256 GB available hard disk space
  - Ethernet controller gigabit
  - Optical drive DVD+/-RW
  - Windows server 2012 R2 64-bit
  - Browser: Chrome version 40 or Firefox version 35 or above
  - Team Viewer version 9 or above
- UPS (1 KVA) with minimum of two hours of battery backup (recommended)
- 15" monitor with 1280 x 1024 resolution
- Standard keyboard and mouse
- Dongle with activated SIM card

## Mobile phone requirements

- Smartphone with activated SIM card (Android version 4.0 or above) for midwife
- USB cables to allow for USB sync by midwife
- Smartphone with HD display (resolution 1280 x 720) and data (Android version 4.0 or above) for doctor

## PC requirements

- PC with following specifications:
  - 1 GHz or faster 64-bit (x64) processor
  - 1 GB RAM (recommended 2 GB RAM)
  - Windows 7 Professional 64-bit OS
  - Browser: Chrome version 40 or Firefox version 35 or above
  - DirectX 9 enabled graphics card
- 15" monitor with 1280 x 1024 resolution
- Standard keyboard and mouse



## Connectivity requirements

- Internet connectivity speed for MOM server recommended 5 MBPS
- Internet connectivity speed for MOM client recommended 512 KBPS
- Wireless router at health center for VISIQ integration

## Complementary components

### Ultrasound

Philips VISIQ ultrasound system (recommended)

### Community care worker kit

- Blood pressure meter
- Thermometer
- Measuring tape
- Weighing scale
- Fetal Doppler
- Urine protein test kit
- Hemoglobin test kit
- Glucose test kit

