

Alcançar project webinar series:

mParto in Monapo: Using a digital application to monitor women during labor, delivery and referral

October 5, 2022





Interpretation instructions

English speakers

- **1. Click on "Interpretation"**
- 2. Select "English"
- 3. Click "Mute Original Audio"

*Portuguese speakers: leave interpretation feature "Off"



Agenda

- Welcome
- Alcançar Project overview
- Introducing Dimagi and mParto
- Implementation successes & challenges
- Q&A
- Closing remarks

Presenters











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Director

The Alcançar Project

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Dimagi

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Ministry of Health Opening remarks



Achieving Quality Health Services for Women and Children in Nampula

5-year project 2019-2024 USAID funded











CONSORTIUM PARTNERS



















We are a 5-year project funded by USAID



FHI 360 is the leader of the consortium

CONSORTIUM PARTNERS















Goals

- Support the Government of the Republic of Mozambique to reduce maternal, newborn and child mortality in Nampula Province
- Establish Nampula Province as a model health system in the implementation of high impact, high quality, patient-centered and gender-responsive MNCH services



Mozambique: Nampula Province



Nampula Province



- Alcançar works in all 23 districts of Nampula Province
- Key innovations were first implemented in 7 districts (Innovation Districts)
- Erati, Memba, Nacala
 Porto, Monapo, Angoche,
 Moma and Ribaue
- Now using phased approach to expand innovations to all 23 districts

Expanding into Zambezia Province



- Currently expanding into 6 districts in Zambezia
- 50 health care facilities, including 4 Hospitals

Ensure delivery of evidence-based high-impact practices along the continuum of care

PREGNANCY	INTRAPARTUM	POSTNATAL / POSTPARTUM	CHILD
 Increased use of facility-based services Provision of quality antenatal care Management of pregnancy complications 	 Skilled care at birth Management of progress of labor Pre-referral stabilization and transfer protocols Management of complications 	 Routine post-natal care Management of newborn and post-partum complications Post-partum family planning services 	 Prevention and management of newborn and childhood illnesses Routine immunizations Growth monitoring and screening/treatme nt for malnutrition

Male engagement and female empowerment curriculum; adolescent responsive health services; humanized and respectful care; improved referrals

Strategies to deliver evidence-based high-impact practices

PREGNANCY	INTRAPARTUM	POSTNATAL/POSTPARTUM	CHILD							
On-site clinical technical support and mentorship, formalized in the District Mentorship Model										
Remote trainings to nurses and APEs										
Community mobilization and care-seeking for safe	QI collaboratives and clinical care packages		Micro-planning and implementation of							
pregnancy	Obstetric and newborr	integrated mobile brigades								
Collaboration with Transform Nutrition	mParto application	Improving care for small and sick newborns	Collaboration with MRITE (global immunization							
		Collaboration with Improved Family Planning Initiative (IFPI)	program) and Advancing Nutrition							



Strategies to deliver evidence-based high-impact practices

PREGNANCY	INTRAPARTUM	POSTNATAL/POSTPARTUM	CHILD
	mParto application		





Introducing Dimagi: Our mission





Create sustainable impact for vulnerable populations through innovative technological solutions for community health workers



Paper-based solutions are often complicated and create a probability of error

Mobile technology solutions improve **efficiency** and **data quality** Mobile technology solutions improve **efficiency** and **data quality**

Mobile technology solutions improve **adherence to clinical protocols**

mParto application

A digital technology that improves decision-making during labor

Why mParto?

Maternal and newborn mortality are high in Mozambique. Most maternal and newborn deaths happen in the 24 hours surrounding delivery. Most are preventable.

The safety of women and newborns depends, in part, on careful monitoring, timely detection of problems and proper intervention.

The partograph helps providers deliver care that meets global standards. However, it is rarely used properly.

Digital applications have emerged as promising strategies to **improve adherence to clinical protocols** and provide **decision support** to skilled birth attendants.

Enter mParto!

mParto application

- mParto is a mobile application for tablets that was developed through the CommCare platform.
- mParto is the Mozambican adapted version of mLabour, implemented in a network of five healthcare facilities in Monapo District since July 2020.

mParto supports the decision-making process during labor through:

Early identification of risks

Exam reminders

Digital partograph



4 KEY MOMENTS

From admission to discharge, **mParto** supports health care providers to deliver evidence-based care, and quickly identify who needs closer monitoring or referral to a higher level of service.

Admission

mParto supports improved screening for risks of bleeding, infection, and eclampsia

Labor & Delivery

2

mParto prompts providers for timely assessments of vital statistics, and

the progress of labor*

3 Immediate Postpartum

mParto improves coverage of immediate newborn actions such as skin-to-skin contact and immediate breastfeeding

Discharge

mParto improves coverage of discharge assessments for the woman and the newborn, including counseling on postpartum family planning



* Automatically graphs all assessments on an electronic partograph

1. Admission

mParto supports improved screening for risks of bleeding, eclampsia, and infection

The health care provider take an obstetric history and screens for danger signs.

mParto prompts the provider to conduct further screening, tests, or increase monitoring depending upon the risk assessment.

If a risk is identified an exclamation mark will appear next to the client's name to indicate that she requires closer monitoring.

2. Labor & delivery

mParto includes all the assessments contained on the paper partograph, with added benefit of automated visualizations, alerts, exam reminders, and decision support.

mParto plots vital signs and results of physical exams, including:

- Cervical dilation
- Contractions
- Maternal heart rate and blood pressure
- Descent of the head of fetus
- Fetal heart rate



3. Immediate postpartum

mParto prompts healthcare providers to conduct required postpartum and postnatal checks:

- Support for initiation of breastfeeding
- Risk assessment for postpartum hemorrhage
- Newborn assessment including reflexes and temperature

If risks are identified, mParto prompts action for intervention or referral.

4. Discharge

mParto prompts healthcare providers to ensure that mother and baby are healthy and ready to return home before they are discharged, by:

- Counselling the mother on danger signs to watch for
- Scheduling a postnatal appointment
- Discussing family planning options

mParto





Timeline of mParto Implementation



Implementation: Successes & Challenges

mParto in Mozambique

- Implementation began with 5 health facilities including a Referral Hospital in July 2020
- Expanded in June 2022 to 13 health facilities with maternity units, totaling 18 health facilities in Monapo district

mParto is implemented as part of comprehensive package of technical support



Successes

Strengthen ed provider confidence

User acceptabilit y

Improved teamwork Continuous improveme nts to the app

Successes

Strengthened provider confidence

Improved risk stratification of pregnant women

Improved provider confidence around identifying risks and timely response

Strengthened clinical skills to respond in emergencies

Strengthened local referral and counter-referral systems

Successes: Risk Screening at Admission

Among the 5,704 women followed with mParto over the time period:

- 100% received risk screening at admission
- 95% identified no risk

261 women with a risk received:

- immediate intervention,
- referral to higher level of care, or
- more careful/frequent monitoring

Distribution of identified risks (n=261)


Indicators of success

User acceptability

MCH nurses report that they like the tool, and that it helps them to identify risks, diagnose, and treat complications during labor in a timely manner

Indicators of success

Improved teamwork

Strengthened teamwork skills to effectively respond in an emergency

Improved coordination and communication between nurses during shift changes

Indicators of success

Continuous improvements to the app Continuous improvements based on user feedback

Currently on version 3 of the application

Challenges

Human resources

Mobility

Absence in maternity due to other activities

Entry of new nurses

Remembering password and using the tablet

Weakness of the Android domain Delays in decisionmaking and appropriate action

> Poor case management according to MISAU National Protocols

Equipment and infrastructure

Keeping tablets charged between shifts

Failure of mobile network for data synchronization

Lack of consistent electrical energy

Solutions

Human Resources

Advocacy with districts and Provincial Directorate for less mobility/turnover

On-the-job training for new nurses

PIN usage

Face-to-face and remote work

Delays in decisionmaking and appropriate action

> Training on correct filling and interpretation of the partogram

Mentorship for timely decision-making according to national protocols

Strengthening skills through integrated technical support

Equipment and infrastructure

Recommendation to deliver charged tablet to each shift team

Monitoring and replacement of SIM cards for mostavailable network

Allocation of electrical accumulators to all health facilities

Key takeaways

Highlights

- High level of acceptability among end users
- Improved provider confidence and teamwork

Ongoing activities

- Continuous support to the end users
- Ongoing user feedback to inform improvements
- Documentation on the impact of mParto to MISAU on the reduction of neonatal mortality in Monapo District in Nampula Province



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Upcoming webinars

Tema/Topic	Mês/Month
Simulação obstétrica: resultados da pesquisa de implementação sobre o efeito da simulação para os profissionais de saúde da linha de frente	February/Fevereiro 2023
Obstetric simulation: Findings from implementation research on effect of simulation for frontline health workers	
Melhoria da Qualidade: Ganhos e aprendizados da colaborativa Alcançar de redução de mortalidade materno infantil	June/Junho 2023
Quality improvement: Achievements and lessons learned from the Alcançar collaborative for the reduction of maternal and infant mortality	
Mobilização Comunitária e Gênero: Mobilização comunitária e GESI como estratégias para a redução da mortalidade materna neonatal e infantil em Nampula	September/Setemb ro 2023
Community Mobilization and Gender: Community mobilization and GESI as strategies to reduce maternal, newborn and child mortality in Nampula Province	

Closing remarks



THE SCIENCE OF IMPROVING LIVES

