MATERNAL HEALTH ENTERS THE INFORMATION AGE IN PERU

How the Wawared project is using technology to collect and share health data that will improve the lives of women and, perhaps eventually, everyone in the nation

POSTED BY BRIAN OWENS ON JANUARY 17, 2017

In much of the developing world, women suffer higher rates of maternal mortality and morbidity than necessary — most of the causes of ill health that lead to sickness or the death of mothers and infants are preventable. The rates are even more disproportionately high among poor and Indigenous communities.

"One of the major issues is that health-care providers and the women themselves aren't armed with accurate, timely, trusted information to make the best decisions on care," says Chaitali Sinha, a senior program officer with the International Development Research Centre, which supports a project called Wawared. It works to ensure women and their health-care providers in Peru have the information they need to make pregnancy and childbirth (*wawa* means "baby" in Quechua, an Andean language) safer by standardizing and sharing that data through a single electronic health record system. Doing so means the right information and advice reaches the most vulnerable groups and improves the integration of health information systems across the country.

The system can send text message reminders of appointments and voice messages in the person's local language (which isn't always Spanish in regions with large Indigenous populations) that give advice about how to have a healthy pregnancy or warning signs to watch for. The project is now being scaled up from a pilot at 15 health centres in one region to 350 centres across the country, including 20 in a jungle region where there have been reports of Zika virus, which can cause birth defects if women acquire it while pregnant. The project's leaders are currently in discussions with Peru's phone companies to fund the service on a national scale.

Wawared also aims to better link the country's fragmented healthcare system. Currently, each region looks after its own system and data sharing between the regions and central government is poor.

"At the country level there's an epidemic of inaccurate, duplicated or invalidated data being gathered that's just put into a black hole at various health facilities and never used," says Sinha.

The e-health records mean midwives will no longer need to spend 40 minutes filling out 15 different forms for each expectant mother at every visit, says Jose Perez-Lu, director general of the Ministry of Health's information technology office and one of the project's leaders. Instead, they'll be able to quickly send that information directly to where it's needed in the ministry, saving valuable time. Under the current system, midwives fill out the papers and send them to the regional health authority. The regional authority then enters the information into its own computer systems, before sending it on to the Ministry of Health. That means it can take several weeks for important data to filter up to the ministry's planners — a problem when they're trying to deal with serious, ongoing disease outbreaks such as the Zika virus.

Women in Ventanilla, Peru, connect with life-saving information on their phones, thanks to a better system for collecting and sharing maternal health information. (Photo: Iván Reátegui Ismodes)

The ministry can also use the data collected to create indicators to help plan how and where to allocate health services. "Data alone can't save lives," says Sinha. "This project aims for interoperability, to create systems that can talk to each other and create a culture where people can share data in a useful way."

Perez-Lu says the data will be used to track how many women are using each health centre, so the ministry will know, for example, how many vitamins and supplements to buy and send to each region. "This is information the ministry needs to take decisions to improve the health of pregnant women," he says.

And there are plans to expand these e-health records to other areas of health care, adds Perez-Lu. Already the ministry has an e-health record for children under five, linked to their mother's pregnancy record, which helps the parents and health-care workers keep the kids' vaccinations up to date. The ministry plans to use the same concept for records tracking tuberculosis, HIV and other diseases. Eventually, everyone in Peru should have a single e-health record that follows them for their entire life, helping not only their doctors keep them healthy but also allowing the government to find the best ways to use its sometimes scarce health-care resources.

"When a local system can share secure, anonymized data between local health facilities and the central ministry," says Sinha, "that's the holy grail of health information systems."

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READING AS THINKING

Answer the following in complete sentences.

1. Based on the photo, title and caption, complete the following table:

Who do you think the article is about?	
What do you think the issue is?	
Where do you think the issue is occurring?	
When do you think the issue is happening?	
Why do you think the issue is important?	
How do you think the issue will be addressed?	

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After reading the article, answer the following questions.

2. **True** or **false**: most causes of maternal deaths are preventable.

3. List one reason that pregnancy and childbirth are not as safe in developing countries as they could be.

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4. What are the different components of the Wawared system and how do they work together?

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5. In the article, Sinha says, "Data alone can't save lives." Explain what role data plays in solving the issue.

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6. Now, with additional information, work in groups to complete the table below:

Who is the article about?	
What is the issue?	
Where is it happening?	
When is it being addressed?	
Why do you think it is important?	
How effective do you think this solution will be?	

Share your responses with the rest of the class.
Discuss other programs and systems that could be put into place to support Wawared as a class.

ONLINE

1. Explore more about maternal health through the World Health Organization and the Centers for Disease Control and Prevention.

2. Watch this video by UN Women and discuss how you think Wawared might help improve these statistics.

3. Read more about what Canada is doing to improve the health and rights of women and children in developing countries.

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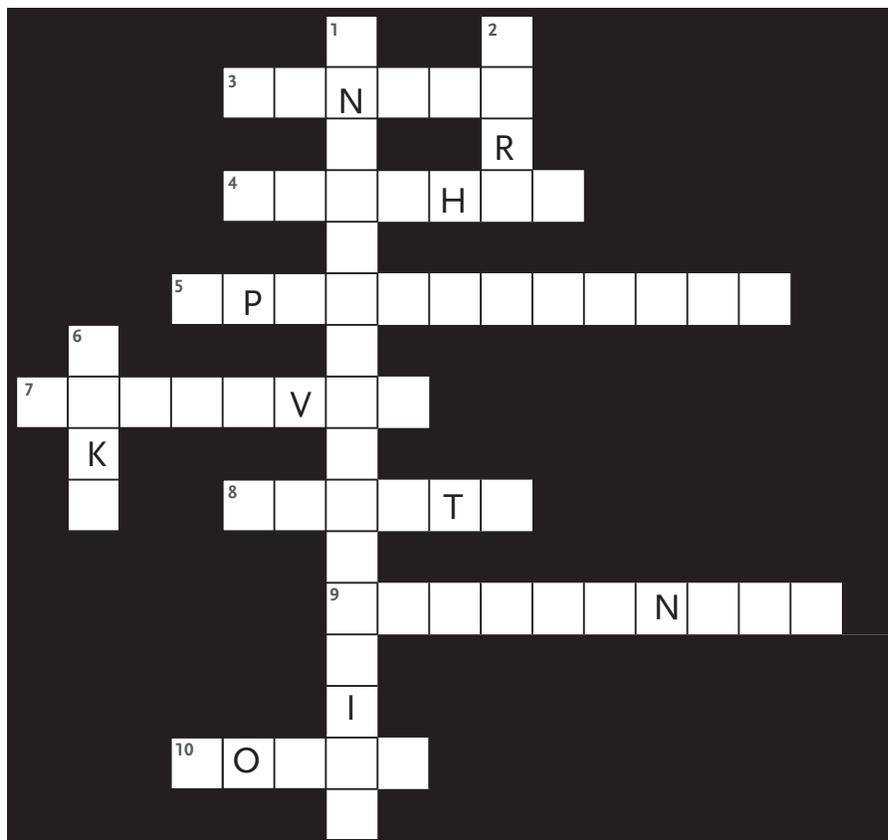
CROSSWORD:

Across
3. The region in Peru where twenty centres are being implemented
4. Wawa means "baby" in this Andean Language
5. Reminders of these are sent to participants
7. Currently, these people complete the paperwork
8. This ministry manages the data collected
9. Maternal mortality and morbidity are higher among these communities
10. The average number of minutes patients used to spend filling out information

Down
1. The ability for different software to exchange information
2. Where Wawared is being implemented
6. The virus that causes birth defects and spread around the world in 2015