

Using the TICK sheet

to improve documentation of routine immunisations

The challenge: under-reporting of immunisation

Improving routine immunisation (RI) coverage is a keystone of the PRRINN-MNCH programme. National surveys and the programme baseline survey consistently report extremely low immunisation rates in the supported states. For example, in Zamfara only 5.4% of children aged 12-23 months had received all basic vaccinations¹ and this only improved to 10.6% in the PRRINN-MNCH endline survey, 2013. While there are many contributing factors, a significant problem lies in accurate data collection.

Normally, all vaccinations given should be recorded in the child health card and in two sets of registers in the primary health care (PHC) facility – a daily tally sheet, which tracks the number of doses delivered by day in groups of five (tallies) and the immunisation register, which contains one line per child and records all their immunisations. However, this is a tedious process and records from the tally sheets are often not fully transcribed, resulting in under-reporting in the monthly summary sheets. PRRINN-MNCH surveys estimated that the real coverage rate in Zamfara was more likely to be around 15%.

Key messages: Inaccurate data is one of the factors in the extremely low immunisation rates officially reported in Northern Nigeria.

- 1** PRRINN-MNCH implemented a pilot study to test the effectiveness of an adapted format using a 'TICK sheet' to simplify and improve data collection.
- 2** The results showed substantially improved immunisation rates in the intervention sites and a generally high level of satisfaction among health workers using the sheets.
- 3** Policy makers should continue to improve the TICK sheet and expand its use.

The response: introducing the TICK sheet

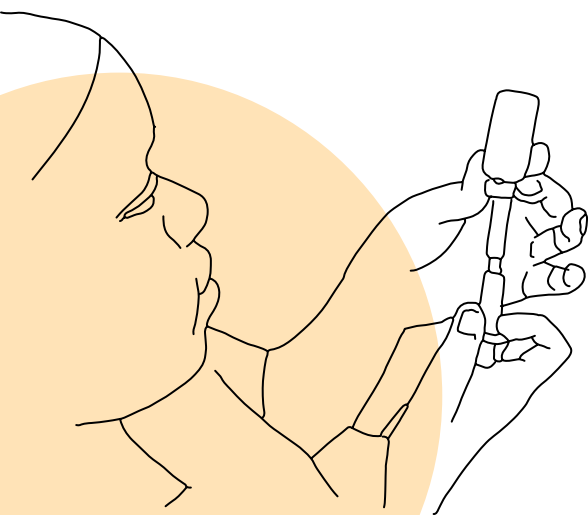
In close collaboration with the Federal Ministry of Health and following detailed discussions with health workers, the Zamfara state team proposed a change to the tally sheet that would transform it into an 'immunisation TICK sheet'. This would improve the function of the former tally sheet and simplify its link to the immunisation register. Health workers merely had to tick the correct vaccination for each child. Columns were added to document when a child is fully immunised and record their immunisation card number.

The idea was that these changes would stimulate greater card use by mothers and health workers, and increase awareness about when a child was fully immunised. The TICK sheet also incorporated tetanus toxoid immunisation in pregnant women.

Advantages of the TICK sheet:

- It requires the recording of the patient's card number, which means that health workers can link the register to the tick sheet, thus improving data collection
- It includes information on card retention, fully immunised children (FIC) and adverse effects from immunisations (AEFI)
- If information is recorded in the tick sheet but not the register, it can easily be added later using the child's registration or card number
- Because of the link between the tick sheet and register, records are harder to falsify

The study was implemented from June 2011 for 11 months in two intervention facilities and two control facilities (which continued using the regular tally sheet). Weekly supervision was provided



for the first six months and then discontinued for the final five months. The objectives of the study were to:

- Test the effect of the TICK sheet at PHC facilities on the completeness and reliability of reporting
- Assess the effect of the TICK sheet on reporting of fully immunised children and immunisation coverage rates in PHC facilities, as well as additional indices like AEFI (events following immunisation) and card retention
- Evaluate the effect of supervision on documentation of routine immunisation
- Assess the RI provider's perception and acceptance of the process of recording and tracking of immunisations

Fig 1: Differences in documented RI coverage rate for DPT vaccine

Reporting was greatly increased.

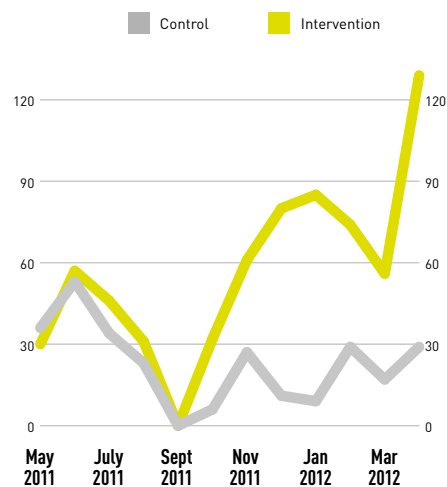
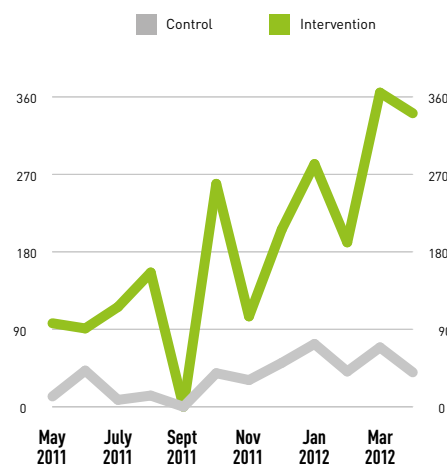


Fig 2: Differences in documented tetanus toxoid vaccination coverage for pregnant women



The results: differences in data revealed

There were stark differences in immunisation-related data collection between intervention and control sites.

Differences in coverage were even more pronounced. Users of the TICK sheet reported that:

- They liked using it because it gives more client information which can easily be cross-referenced with the immunisation register
- All fully immunised children (FIC) are easily identified
- It's quick and easy to use as names of antigens don't have to be written out, but simply ticked, thus speeding up the process
- Limitations with the TICK sheet included the lack of a bottom row for noting the grand total and lack of provision for the name of the client or the date
- Shortages of vaccines undermined efforts to increase immunisation coverage

Policy implications

The TICK sheet proved to be an effective mechanism to improve data collection and increase reported immunisation coverage.

- Additional advantages include a speedier vaccination process, thus shortening the waiting time for clients, and easier interpretation of data for health workers, enabling them to track clients and ensure full immunisation more effectively.
- The Zamfara government should continue to improve the sheet, test its acceptability in other facilities and monitor results to share with the federal government and promote further expansion.



Conclusion

The TICK sheet is an effective tool in enabling more accurate recording of RI in health facilities. Expanding its use could have a significant impact on health outcomes in pregnant women and children.

References:

1. National Population Commission (NPC) [Nigeria] and ICF Macro. 2009. Nigeria Demographic and Health Survey 2008. Abuja, Nigeria: National Population Commission and ICF Macro.



Partnership for Reviving Routine Immunisation in Northern Nigeria; Maternal Newborn and Child Health Initiative

The PRINN-MNCH programme works with federal, state and local governments and local communities to improve the quality and availability of maternal, newborn and child health services.

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