New Incentives

BCG Scar Update

Purpose of Document

This document contains a brief update on checks of infant BCG Scars prior to enrollment and during returning visits, along with updates on measures to detect and reduce fraud.

BCG Scar Check for Enrollments

1. Question:

Old BCG Scar on Arms
ANSWER: Does the infant have an old BCG scar? Personally verify on the upper left and right arm of the child. Does the infant have an old BCG scar and which arms did you check?

- ○ Yes, there is an old BCG scar and I checked both of the infant's arms for the old BCG scar
- ○ Yes, there are old BCG scars two or more times and I checked both of the infant's arms for the old BCG scar
- ○ Yes, there is an old BCG scar but the infant is new and has required evidence
- ○ No, there is no old BCG scar and I checked ONE of the infant's arms for the old BCG scar
- ● No, there is no old BCG scar and I checked BOTH of the infant's arms for the old BCG scar

2. Results: Page 7 (BCG Scar Verification) of Inquiries (Link)

BCG Scar Assessment	Count	% ▾
No, there is no old BCG scar and I checked BOTH of the infant's arms for the old BCG scar	238,892	97.82%
No, there is no old BCG scar and I checked ONE of the infant's arms for the old BCG scar	4,173	1.71%
Yes, there is an old BCG scar but the infant is new and has required evidence	634	0.26%
Yes, there is an old BCG scar and I checked both of the infant's arms for the old BCG scar	519	0.21%
Yes, there are old BCG scars two or more times and I checked both of the infant's arms for the old BCG scar	3	+0%
Grand total	**244,221**	**100%**

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BCG Scar Check during Returning / Post-Enrollment Visits

1. Question:

BCG Scar on Arm
ANSWER: How many BCG scars does the infant have? Personally verify on the upper left and right arm of the child. Check BOTH arms.
Hidden4
Required Mobile

- ● ONE scar: Infant has only 1 BCG scar on the LEFT arm, I checked both arms
- ● ONE scar: Infant has only 1 BCG scar on the RIGHT arm, I checked both arms
- ● TWO or more scars: Infant has 2 or more BCG scars on either ONE or BOTH arms
- ● ZERO scar: Infant does not have any BCG scars, I checked both arms

2. Results for this can be found on Page 7 (BCG Scar Verification) of Inquiries ([Link](#)).

BCG Scar Assessment	Count	% ▼
ONE scar: Infant has only 1 BCG scar on the LEFT arm, I checked both arms	87,566	97.28%
ZERO scar: Infant does not have any BCG scars, I checked both arms	2,404	2.67%
TWO or more scars: Infant has 2 or more BCG scars on either ONE or BOTH arms	34	0.04%
ONE scar: Infant has only 1 BCG scar on the RIGHT arm, I checked both arms	14	0.02%
Grand total	**90,018**	**100%**

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Notes: Since adding this question we have found that the number of cases where Field Officers are reporting a BCG Scar is much higher than expected. Audits have shown that the protocol adherence for this question is currently inadequate. We found that review of BCG Scars by clinic staff was not being done diligently either. As per the findings below ([Page 6 of Activities & Expenses](#)), there have been 149 visits where Clinic Staff were found not checking BCG Scar, 37 visits in which the FOs were not diligently checking BCG Scars, and 10 infants identified by Managers and auditors as having Two or more BCG Scars.

| ☑ Identified Issues	#
🔍 scar	✕
☑ BCG Scar Check Clinic Staff	149
☑ BCG scar check FO	37
☑ Interview BCG Scar Check	10

As a result, the Field Officers are going through training to check the BCG Scars such that they clearly understand the importance of checking and answering this question accurately. In each case where the Field Officer is found not reviewing the BCG Scar, the Field Officer is issued a Discrepancy (recording of an offence). If the Field Officer is found repeating such errors, they are issued a Disciplinary Action which is one of the factors that can lead to them getting placed on a Performance Improvement Plan. We expect that these actions will result in increased adherence to the protocol of diligently checking both arms of the infants who had previously been enrolled.

Updates in Measures to Detect and Reduce Fraud

The Out of Catchment analysis from IDinsight demonstrated that there is potential enrollment fraud affecting a larger number of enrollments than previously estimated, beyond infants coming from outside of the catchment who meet all other criteria for enrollment and cash disbursements.

Below are some of the actions that we have taken to strengthen fraud identification in the last few months:

- Testing of biometrics solutions
  - We have tested face biometrics solutions from three companies so far. We conduct validation tests using datasets that have been manually reviewed so that we can compare the results of the biometric solution to what we think to be 'true'. We found that one solution was able to accurately detect the same beneficiary 94% of the time, meaning this solution could miss approximately 6% of cases or have a false negative match rate of 6%. We tested this solution against a dataset where we do not expect duplicate caregivers and the solution found a match rate of approximately 12%. We are now going through these prospective matches manually to assess whether these are true matches or false positives. Based on these findings, we will be able to calibrate the solutions and make improvements to reduce the rate of false positives and false negatives. We have introduced new protocols to capture biometric-friendly caregiver and infant photos.
  - Carrying out validation tests, finding a viable biometrics solution, and getting the solution and related processes in place for all enrollments is a high priority.
- Improved Console Checks (Recently added)
  - BCG Scar Check: Console reviewers were not able to reliably confirm if infants had fresh BCG Scars from the photos. As a result we introduced a protocol to circle the fresh BCG scar so that there is additional accountability to the FOs checks on the field and it's easier for reviewers to assess.
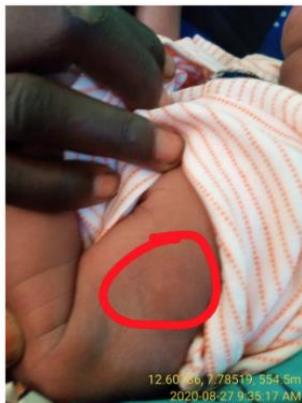
  - Same Caregiver and Same Infant Checks: We have introduced processes that will allow us to determine if the same caregiver and infant is returning across disbursements for a given ABAE ID. In some cases of fraud and collusion at the clinics, the clinic staff and/or FOs hold on to cards and give them to various caregivers during different visits in exchange for part of the disbursement.
  - Infant Age Check: We have tested Console reviewers entering the generalized age groups of infants (e.g. 0-3 months, 4-6 months) to help us identify cases where the age based on the date of birth is very different from the approximate age group based on the infant's photo. We will be refining and rolling this out across enrollments.
- Improved protocols for supervision and audit visits
  - A detailed protocol has been developed for managers and auditors to review adherence of operational protocols and submit concerns from the clinics. The new protocol includes caregiver

interviews where the infants BCG Scar is checked and questions to identify potential fraud as well as carry out interviews with enrolled caregivers. Below are some examples of issues reported by caregivers:

- Number tags issued were not being followed correctly
- Long waiting in the clinic thereby reaching home late
- Late arrival of clinic staff
- Vaccine side effects
- A caregiver's sister had two CHCs but one infant (likely fraud)
- Complaints about eligibility criteria (specifically catchment area)
- Acquaintances in settlements not wanting to bring infants until 6-7 months due to cultural reasons

- Increased ownership of fraud by operations team
  - One of the core issues we identified was that the Operations Team did not feel adequately responsible for mitigating fraud. Beyond following protocols, actively detecting and mitigating fraud was thought to be the responsibility of Auditors. All operations managers received training and guidance on fraud mitigation along with an understanding of the strategic importance of addressing fraud. This ownership by managers in the operations team has led to potential cases of fraud being reported by Field Officers and Field Managers as well as ideas of resolution and mitigation. This has been a shift in the team's approach.
  - One of the ongoing measures being implemented is shuffling of FOs to other clinics. We expect to complete this transition by mid-October and review clinics where there are significant changes in metrics such as the number of enrollments, while encouraging teams to report cases of fraud and take strict action on these.
  - Fraud consequences: We realized that it is important for clinic staff to be promptly changed at clinics when we identify fraud is occurring at a clinic where the clinic staff is complicit. In order to get support for this action to be taken at clinics where we identify fraud, we have secured commitment from the Primary Health Care Directors in the LGAs we work as well as the clinic in-charge at 95 out of 98 of our clinics so far.
- Fraud Analyst and data review
  - We have recruited an experienced remote Fraud Analyst with the skills to review data collected across a variety of [Operations Fraud Indicators Monitoring](). This expertise is helping us improve our processes for detecting fraud, increasing the quality of evidence from auditors and managers and training of auditors to have the skills to prove alleged cases, and taking targeted steps to conclusively establish the presence or absence of potential fraud.
- Initial findings
  - Many of the above steps are beginning to come together such that we are starting to identify fraud more conclusively. For example, at a learning clinic (1503 in Zamfara), we found that caregivers varied from one disbursement to another in over 30% of the cases where Measles disbursement was given in the month of July 2020. This investigation is currently ongoing and a priority to resolve.