

# STREAMLINING NEONATAL JAUNDICE PHOTOTHERAPY: LEAN STRATEGIES FOR RAPID RESPONSE

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## SELECTION OF OPPORTUNITIES FOR IMPROVEMENT

Phototherapy is a common treatment for neonatal jaundice, a prevalent condition, characterized by yellow discoloration of the skin and sclera due to elevated levels of bilirubin in the blood among newborns. Delaying the reduction of bilirubin levels can lead to complications such as bilirubin encephalopathy or kernicterus. The aim of the study was to reduce the waiting time for neonates with jaundice to receive phototherapy.

## KEY MEASURES FOR IMPROVEMENT

The key indicator for improvement was measured by the percentage of neonates who had to wait more than 30 minutes to receive phototherapy after hospital registration. The standard was set at 30 minutes based on the discussion during the interfacility meeting.

## ANALYSIS AND INTERPRETATION

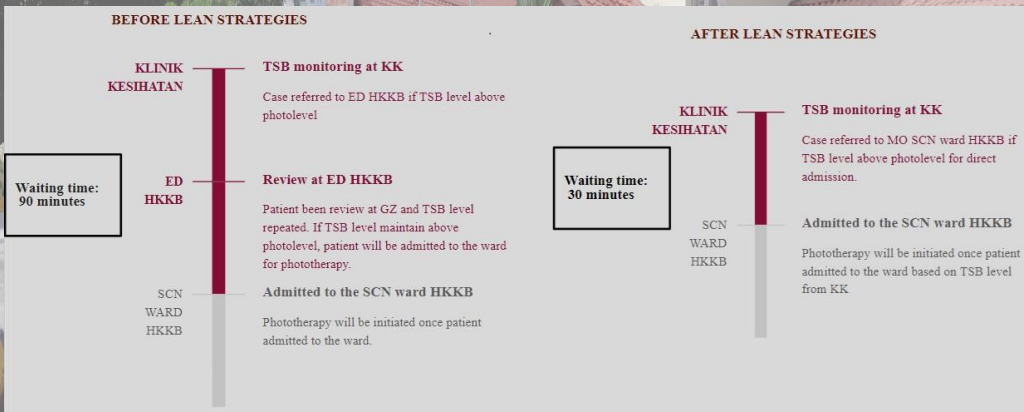
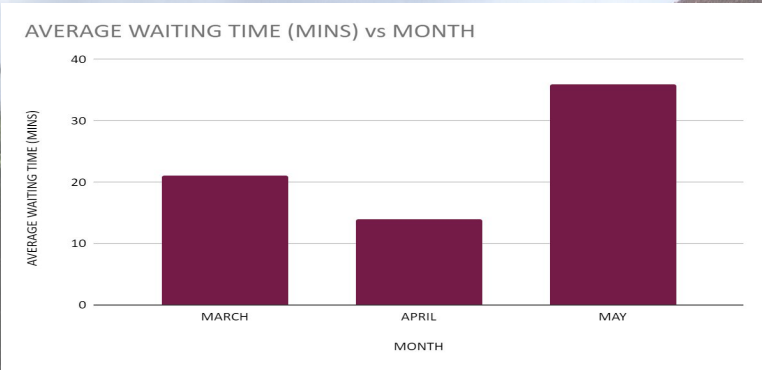
The pre-remedial study showed that all patients waited for more than 90 minutes to receive phototherapy. This delay was due to serum bilirubin levels being repeated in the hospital and being triaged to the Green Zone.

## PROCESS OF GATHERING INFORMATION

A cross-sectional study conducted from March 2022 to May 2022 included all 31 neonates with jaundice who were admitted to the obstetric ward for phototherapy. Data to identify contributing factors for delayed phototherapy were collected using an audit form.

## STRATEGIES FOR CHANGE

Discussions with family medicine specialists and the district health officer were conducted to improve the workflow process from receiving referrals to initiating phototherapy. It was decided that repeated bilirubin testing would be done only after phototherapy commenced, leading to the establishment of a new workflow for admission.



## EFFECT OF CHANGE

The waiting time for neonates with jaundice to receive phototherapy had been reduced from 90 minutes to an average of 30 minutes.

## THE NEXT STEP

It is crucial to maintain this workflow to ensure that neonates with jaundice receive optimised care through the use of computerised systems and effective communication.