

# Improving Antenatal Care 1st Visit <20 Weeks Rate in a Primary Healthcare Clinic

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# Context

- **Dresser Clinic** is a Primary Health Care facility in Ekurhuleni South district.
- The initial QI project was to increase the rate of **women less than 20 weeks gestation attending the clinic for their first antenatal visit.**
- Early ANC first visits are associated with greater effectiveness of a PMTCT programme <sup>1</sup>
- The facility's initial **aim was to improve antenatal first visits below 20 weeks from 38% to 60% by 30 July 2013.**
- This aim was revised upwards following the successful attainment of 60% on this indicator. The current aim is to sustain performance at 80%.

1. Revised PMTCT Anti-retroviral Guidelines 2013. NDoH



# Problem

The problem of late “1<sup>st</sup> visit” for pregnant women was investigated using a number of techniques to help the facility QI team to identify some of the root causes underlying this problem.



# Root Cause Analysis

Using a **process map** and a **cause and effect (fishbone)** diagram, the facility theorized that some of the root causes could be:

- poor health education on the importance of visiting the facility early on in pregnancy.
- women not attending early ANC visits because the clinic only saw ANC 1<sup>st</sup> visits on one day of the week.
- missing women who were already in the clinic and pregnant but were there only because they were not feeling well.



Root Cause Analysis



# Intervention/Method

- A variety of changes were tested in an effort to address the hypothesized root causes. These included:
  - **Improving health education sessions**
  - **Extending ANC services from one day to five days a week.**
  - **Screening all women of childbearing age for last menstrual period.**



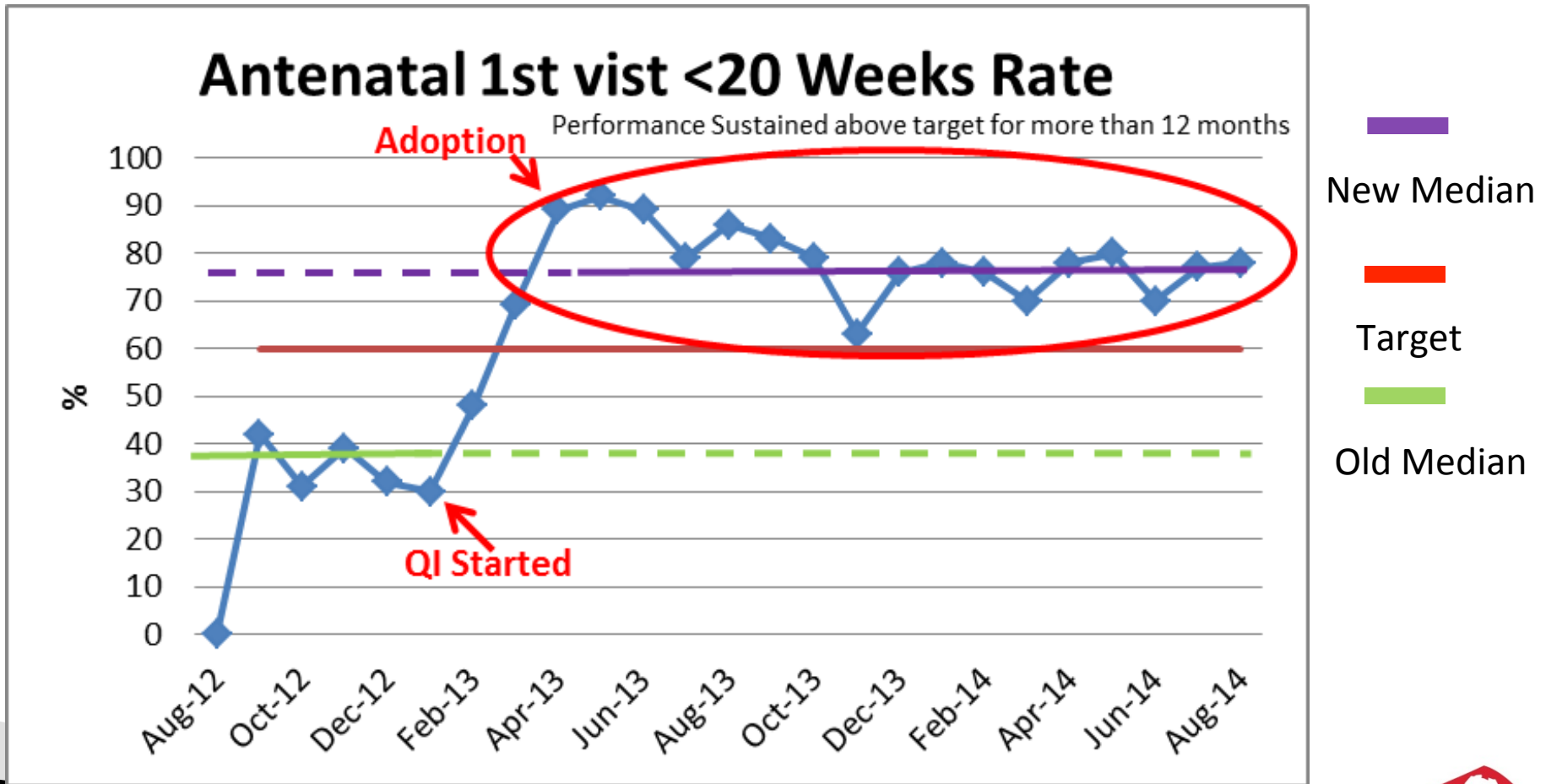
# Results

- Antenatal 1<sup>st</sup> visit rate **improved from 38% in January 2013 to a new median of 76% between March 2013 and July 2014.**
- This improvement reflected special cause variation according to trend rules for run charts<sup>2</sup>. In other words, there was a significant improvement linked to the change ideas which were implemented in the clinic.

Langley, G. J., Moen, R., Nolan, K. M., Nolan, T. W., Norman, C. L., & Provost, L. P. (2009). *The improvement guide: a practical approach to enhancing organizational performance*. John Wiley & Sons.



# Results



Source: DHIS



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# Interpretation of run-chart

- **Interpretation of the run chart:** The first change took place in January 2013, this was followed by an intensive phase of testing different change ideas. The testing phase came to an end in April 2013.
- The challenge became an issue of sustaining the improvements and building the change ideas to the standards operating system in the clinic.
- Sustaining change is often the hardest part of improvement. As may have been expected the system fell a little below its peak performance of April 2013 but the new median is significantly higher than the median before the changes were introduced. This is a signal that Dresser has managed to sustain their improvement.





# Effects of changes

- Extending the booking hours provided pregnant women with more flexibility.
- Screening all women of child bearing age for pregnancy enabled the facility to identify pregnant women who at times had not themselves realized that they were pregnant.
- The true effects of change are observed when the change is sustained within a system, as is evident in the graph provided.



# Conclusions

- Dresser Clinic has provided us with a fantastic example of how using QI methodology can improve a step in the PMTCT care pathway.
- This success can be used to motivate other facilities to take up the methodology in order to improve gaps they identify in their services.



# Dresser Clinic Team Celebrating Success

