# Health Systems Strengthening through Quality Improvement (QI) Approaches: The Lwala Community Alliance QI Initiative

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## BACKGROUND

❑ Strengthening health systems in low- and middle-income countries remains an essential catalyst towards the attainment of universal health coverage (UHC).[1]

❑ The World Health Organization (WHO) health systems framework presents an opportunity to assess and evaluate the performance of health facilities based off its six building blocks: **leadership and governance**; **health workforce**; **medical products and technologies**; **information systems**; **healthcare financing**; **service delivery**.[2]

❑ The Lwala Community Alliance is a non-profit organization, located in the Rongo sub-county of western Kenya, with focus on improving the health outcomes of the sub-county's inhabitants.

❑ Quality improvement (QI) project
  ➢ Started mid-2018
  ➢ Six (6) partnering government health facilities in the catchment area
  ➢ To identify gaps for improvement and enhance the quality of health care services delivery.

## METHODOLOGY

QI initiative:

❑ Commenced with a baseline health facility assessment (HFA) to generate an HFA score

❑ Facilities assessed on the six WHO health systems framework building blocks.

❑ Health Improvement QI (Plan-Do-Study-Act 'PDSA') model to identify and address problem areas.

  ➢ Assessment tools employed include case observation guidelines (COGs);data quality audits (DQA);patient and staff satisfaction surveys

❑ HFA conducted on a biannual basis thereafter with QI programs running concurrently.
  ➢ Three(3) rounds of HFA have been conducted so far.

❑ Data Analysis:
  ➢ T-test (mean comparator test); ANOVA
  ➢ STATA statistical software(version 15)

## RESULTS

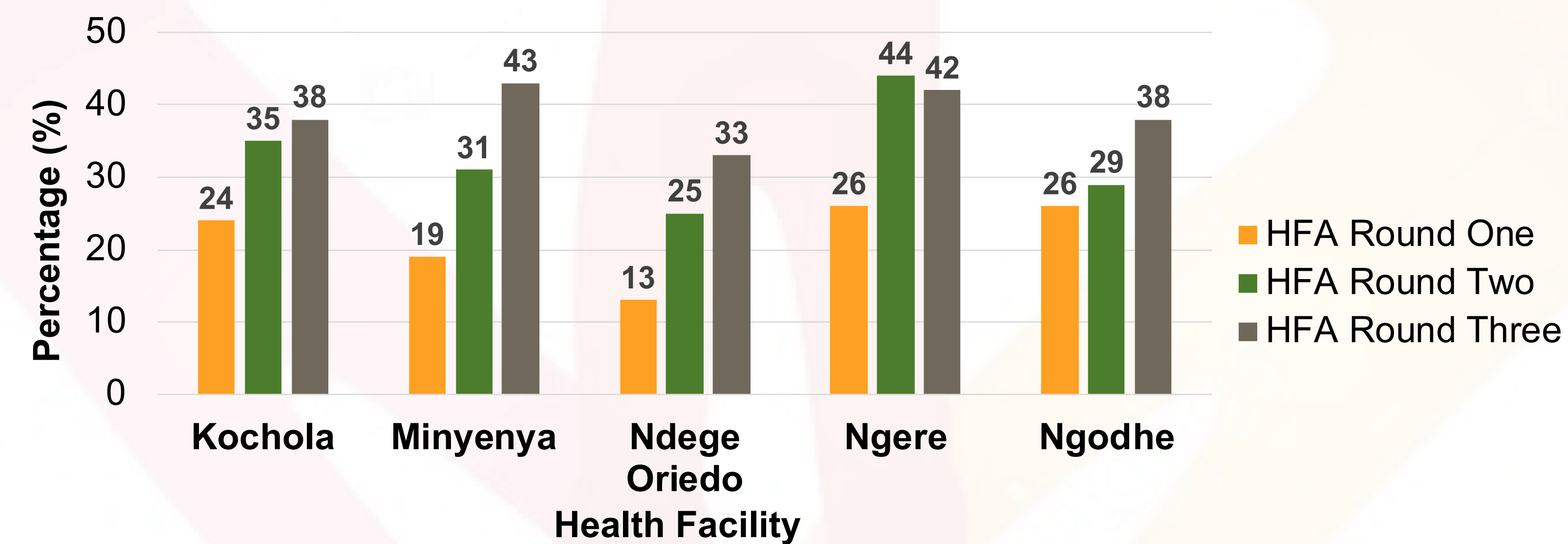*The results displayed pertain to 5 health facilities who were assessed in each of the three HFA rounds*



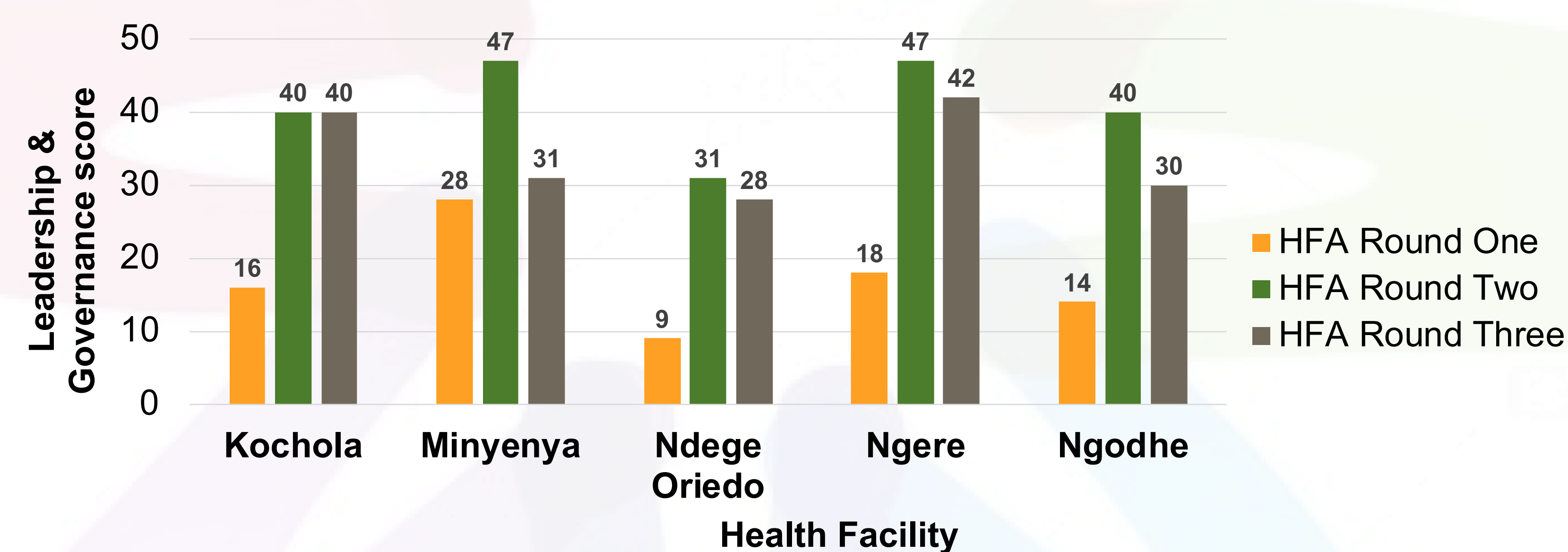**Figure 1:Total HFA scores (adjusted) per HFA round by health facility**



**Figue2. Leadership & Governance scores per HFA round by health facility**

**Table 1: Differences in mean scores across the facilities between Rounds 1 & 3**

| HFA Component (score) | HFA Round 1 mean score (Baseline) | HFA Round 3 mean score (1 year-post baseline) | Mean difference | 95% CI Interval | p-value |
|---|---|---|---|---|---|
| Total HFA (adjusted) | 21.6 | 38.8 | 17.2 | 9.99 – 24.41 | 0.0007 |
| Leadership and Governance | 17 | 34.2 | 17.2 | 7.44 – 26.96 | 0.0036 |
| Finance | 2.6 | 5.4 | 2.8 | 1.09 – 4.51 | 0.0061 |
| Medical Products and Technologies** | 39.25 | 28.25 | 11 | 5.48 – 16.52 | 0.0066 |

*\*\*Decrease in score signifies an improvement; Excludes the Ngere Health facility*

## CONCLUSION

❑ Significant increases in average scores across the 5 health facilities were seen in the following areas: leadership and governance; finance; finance; medical products and technologies and in overall HFA scores.

❑ Organizations such as Lwala, present an opportunity to implement QI projects in government health facilities in resource-limited settings.

❑ QI activities are an important driver of health systems' strengthening towards the attainment of UHC (Sustainable Development Goal 3).

❑ Subsequent rounds of complete health facility assessment in all components will be required to assess the full scale of impact of the initiative.

❑ A complete assessment in all six WHO building blocks was not achieved for all health facilities over the three rounds (*Limitation*).

## REFERENCES

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2. Mounier-Jack S, Griffiths UK, Closser S, Burchett H, Marchal B. Measuring the health systems impact of disease control programmes: A critical reflection on the WHO building blocks framework. *BMC Public Health*. 2014. doi:10.1186/1471-2458-14-278

## ACKNOWLEDGEMENTS

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