



BROADREACH

Automated Analytics for Implementing Partners to Effectively Impact Patient Outcomes

Best Practices and Innovations

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Background to Automated Analytics

- Started as an internal requirement
- Why automate analytics?
- Many ways to use analytics to determine where and how to impact patient outcomes:
 - Identify gaps between performance and targets (What is happening?)
 - Identify high impact sub-districts/facilities (Where is it happening?)
 - Investigate performance vs resources (Why is it happening?)
- Today the focus will be on **High Impact Analysis**
- Show examples of how High Impact Analysis is used

Background to High Impact Analysis

- High Impact Analysis answers the question:

Which districts/sub-districts/facilities are having the largest negative impact on provincial/district performance?

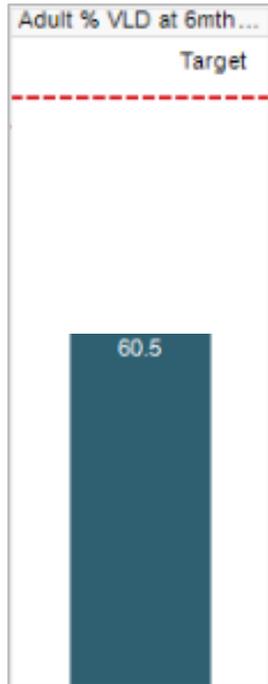
- Algorithm combines patient volume and indicator performance
- Applicable for whole programme or for one indicator
- Combines data from multiple sources

Application of High-Impact Analysis

- High-Impact Analysis is used to answer key questions to support programmatic efforts. Five examples:
 1. Which facilities in a district need to hit their “%VLD at 6-months” target in order for the district to improve by 50%?
 2. How are hospitals impacting district performance?
 3. Are facilities impacting the adult’s and children’s HIV programme performance equally?
 4. Which facilities are outliers?
 5. Are Human Resources potentially impacting service delivery in certain facilities?

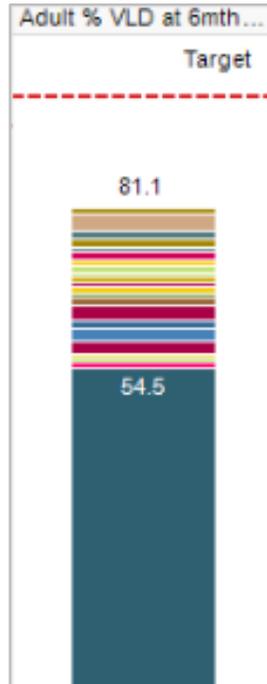
Example1 : Targeted Improvement of % VLD at 6 months

50% improvement



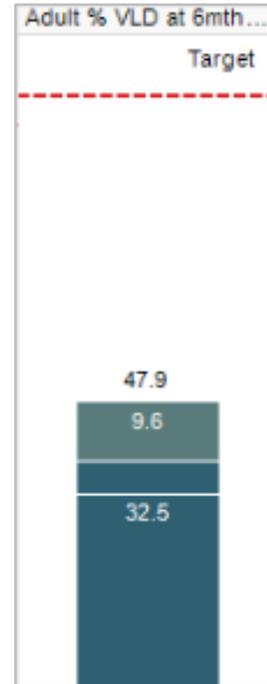
Ugu:
24/56 facilities
43% of facilities

50% improvement

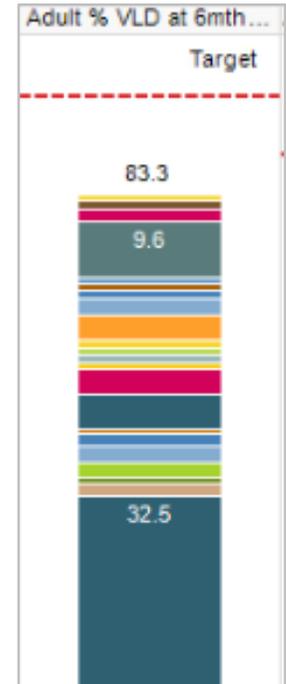


Gert Sibande:
22/80 facilities
28% of facilities

50% improvement 156% improvement

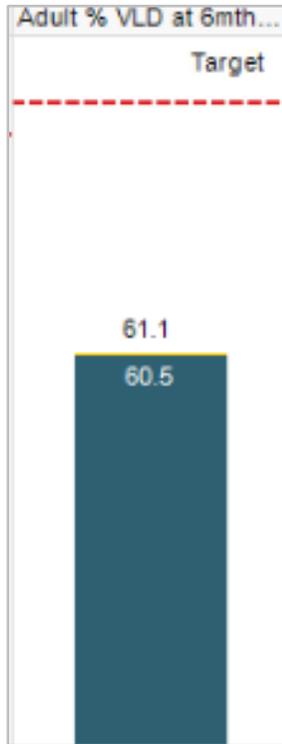


Alfred Nzo
2/75 facilities
3% of facilities

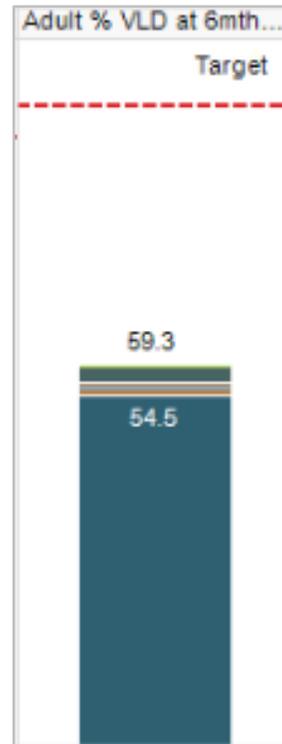


Alfred Nzo
20/75 facilities
27% of facilities

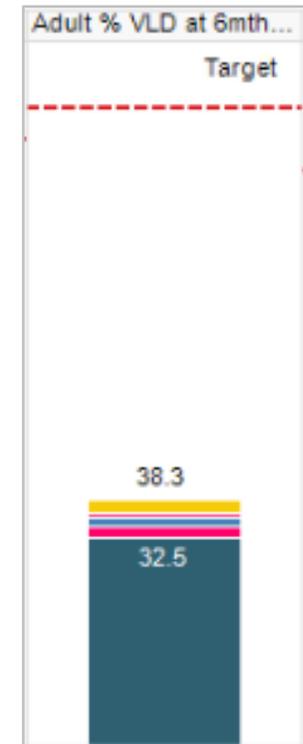
Example 2: Contribution of Hospitals to Performance



Ugu:
0.6% improvement

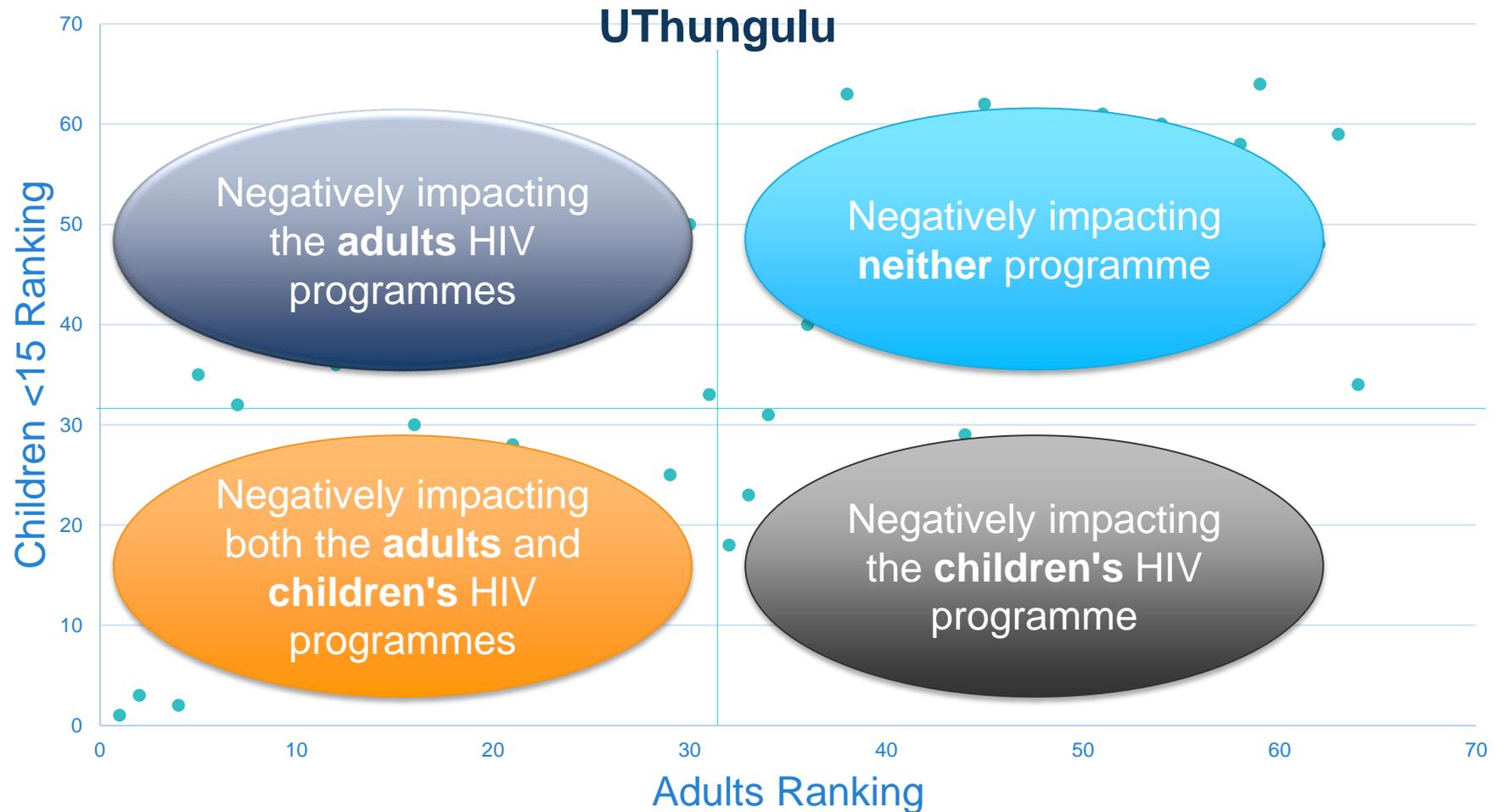


Gert Sibande:
4.8% improvement

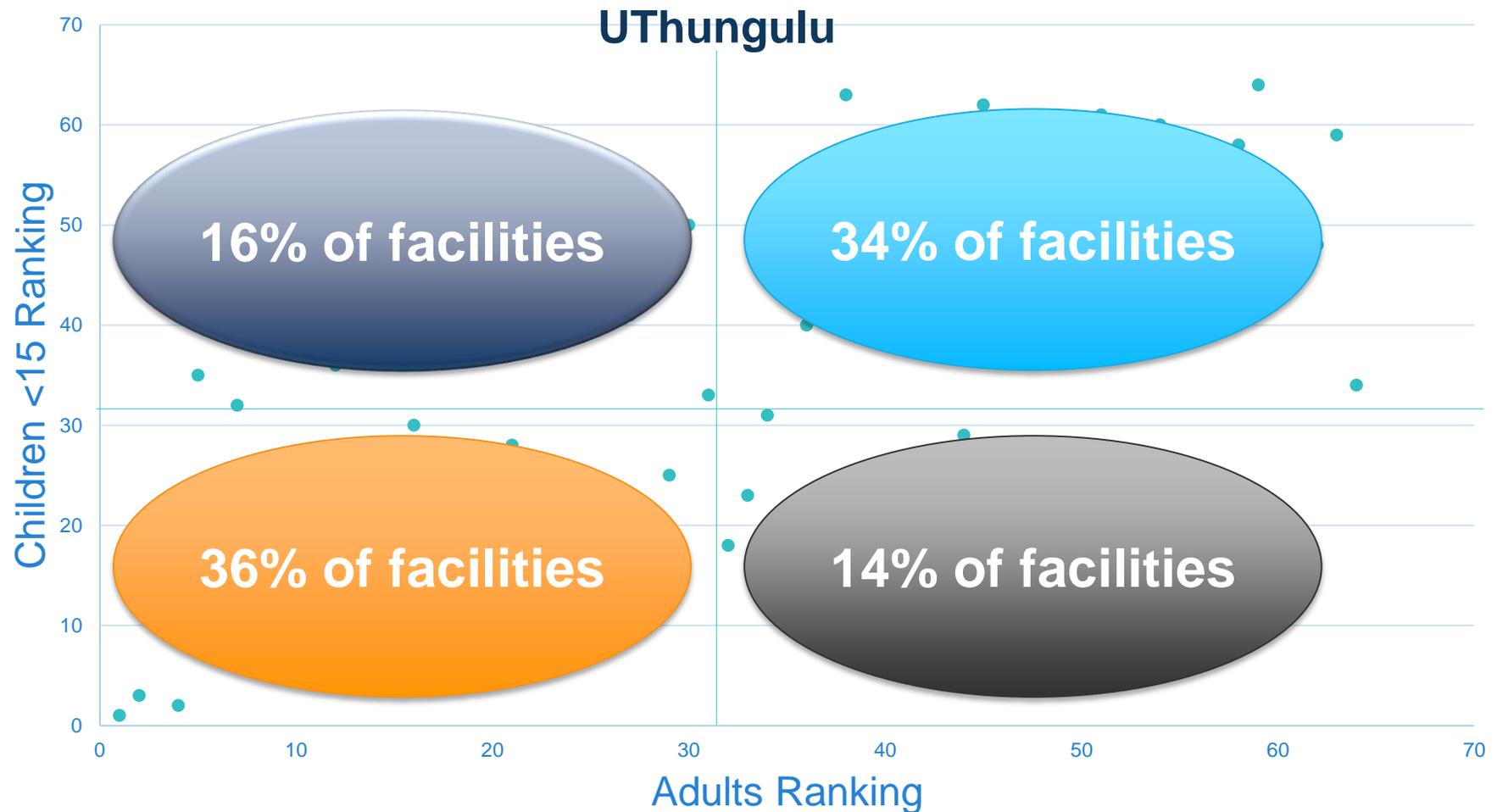


Alfred Nzo
5.8% improvement

Example 3: Facility's Impact on Children & Adults

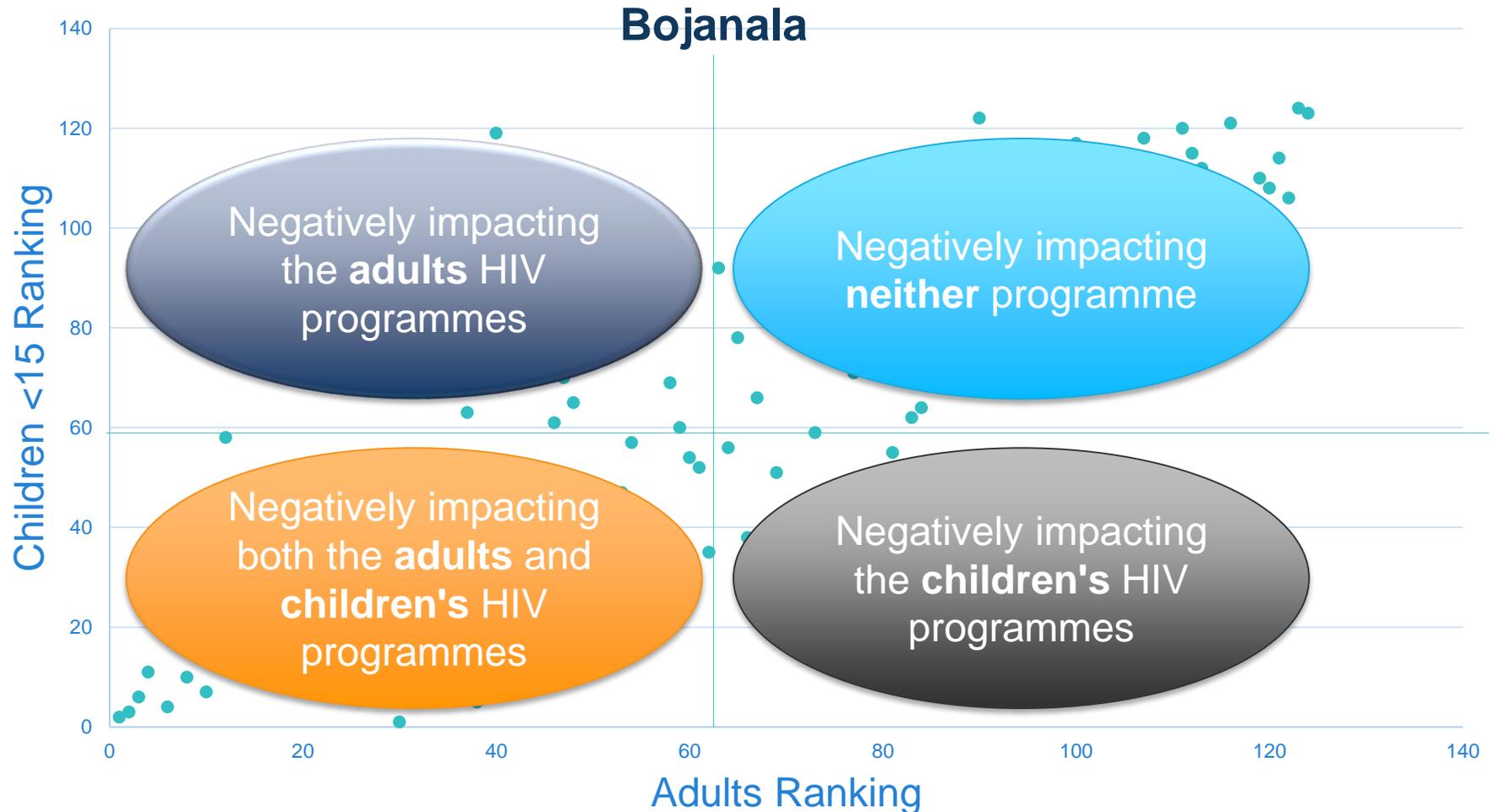


Example 3: Facility's Impact on Children & Adults

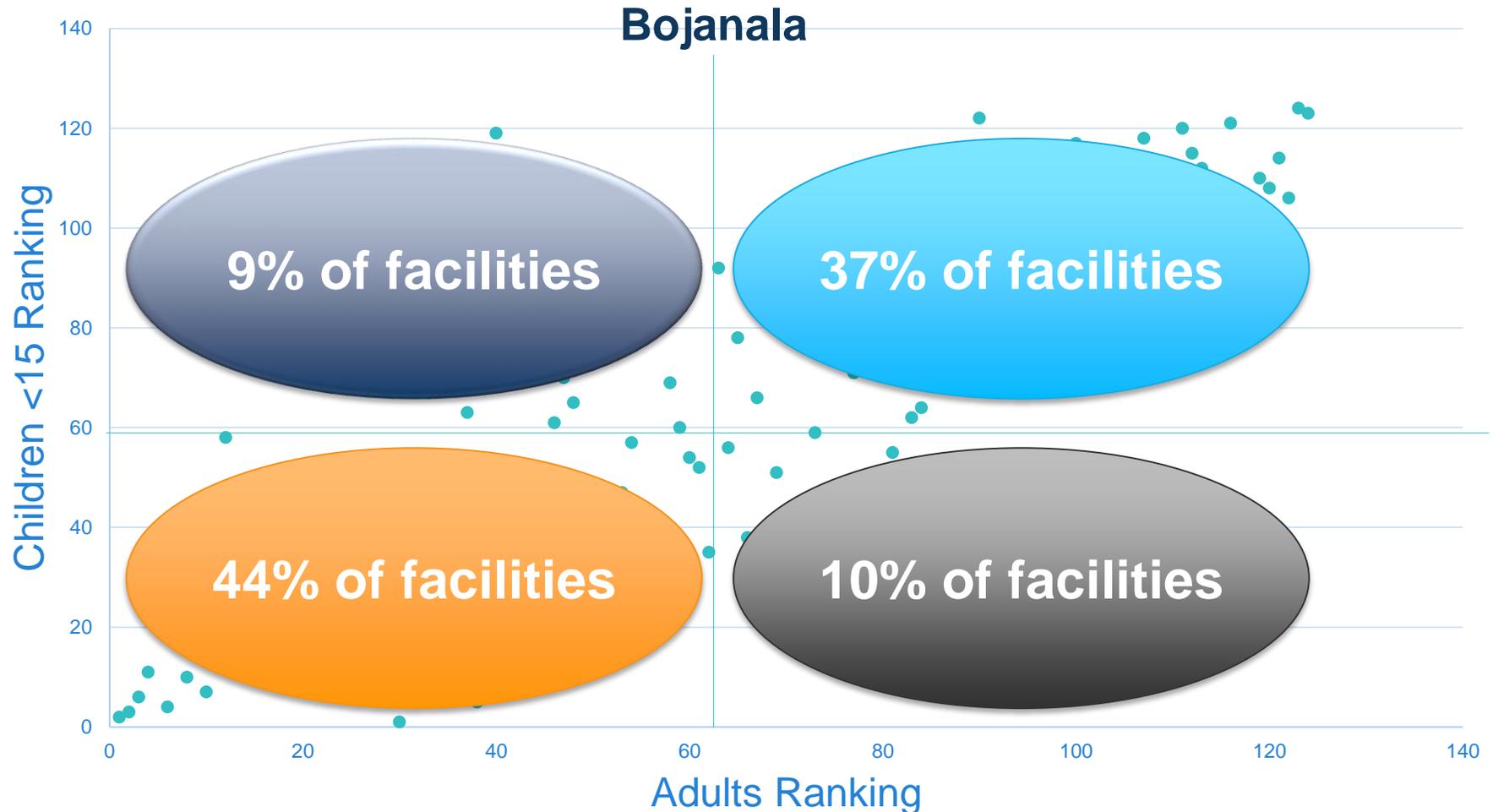


36% of facilities are negatively impacting both adults and Children's HIV programmes

Example 3: Facility's Impact on Children & Adults

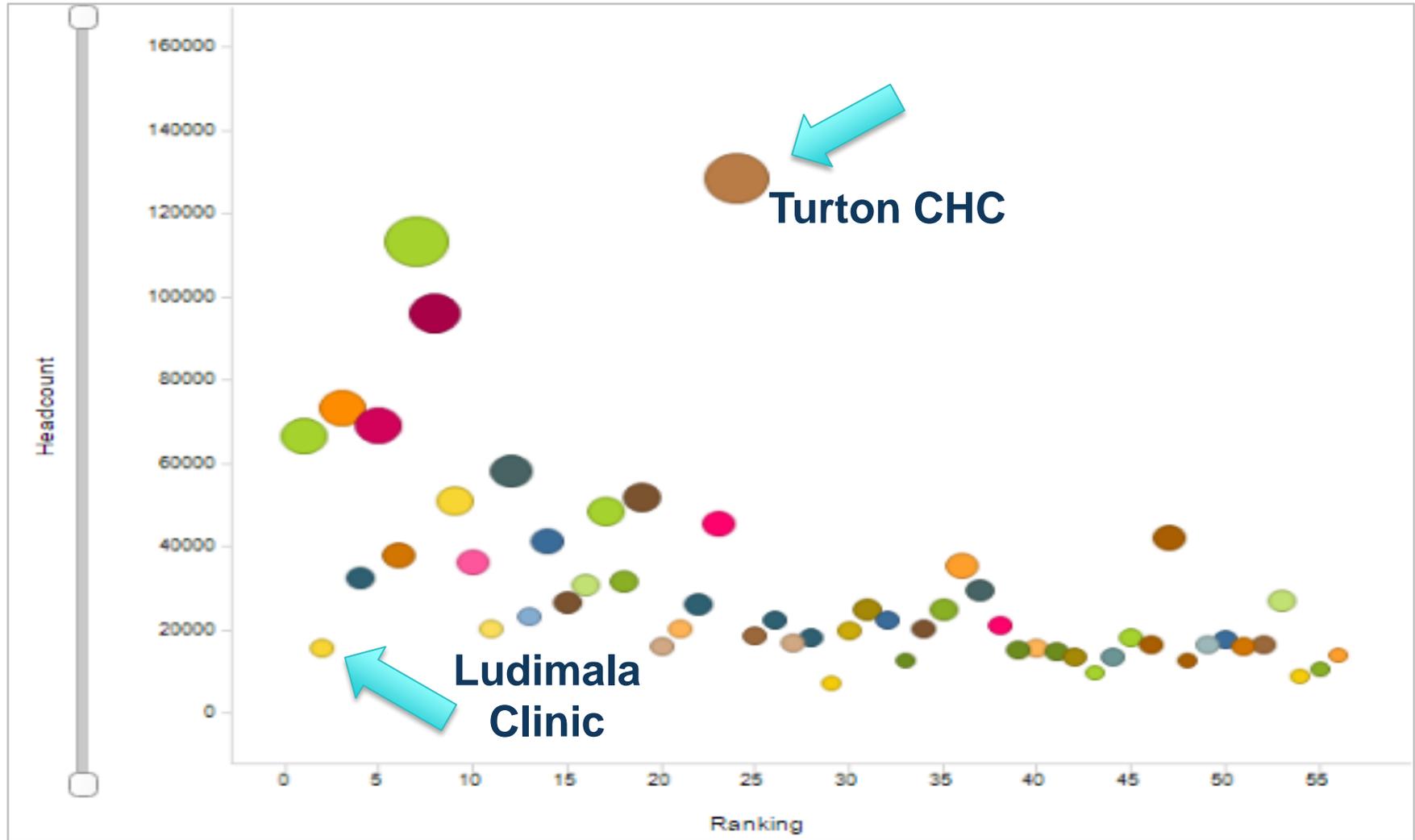


Example 3: Facility's Impact on Children & Adults

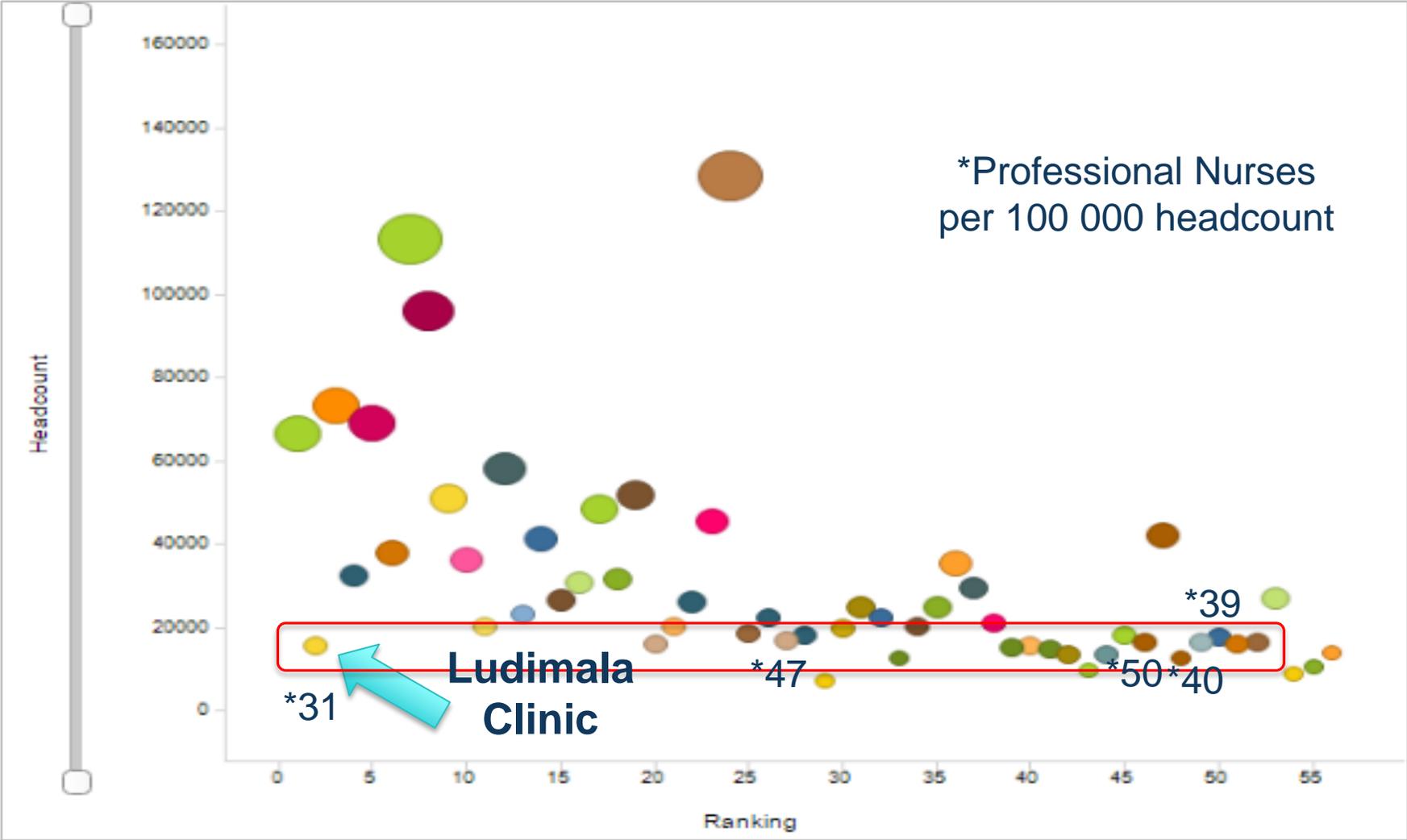


44% of facilities are negatively impacting both adults and Children's HIV programmes

Example 4: Identifying Outlying Facilities in Ugu



Example 5: High Impact Ranking & Resources



Conclusions

- Prioritising focus for impact should not be based on just patient volume or just indicator performance
- Using high impact analysis can optimise the number of facilities a partner needs to improve in order to improve overall district performance
- Different sub-districts/facilities impact specific programmes and indicators differently

Recommendations

- ▶ Automate advanced analytics to ensure:
 - Repeatable, standardised, high quality analysis
 - Wider understanding of and involvement in analysis outputs
 - Ability to dig deeper and explore wider around a specific issue
- ▶ Understand the nuances of how different sub-districts/facilities impact district performance

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Take Away Messages:

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- Using high impact analysis can optimise the number of facilities a partner needs to improve in order to improve overall district performance
- Different sub-districts/facilities impact specific programmes and indicators differently

Recommendations:

- Automate advanced analytics
- Understand the nuances of how different sub-districts/facilities impact district performance