High and low performing clinics in Northern Nigeria

An analysis of *the determinants of performance*

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Background

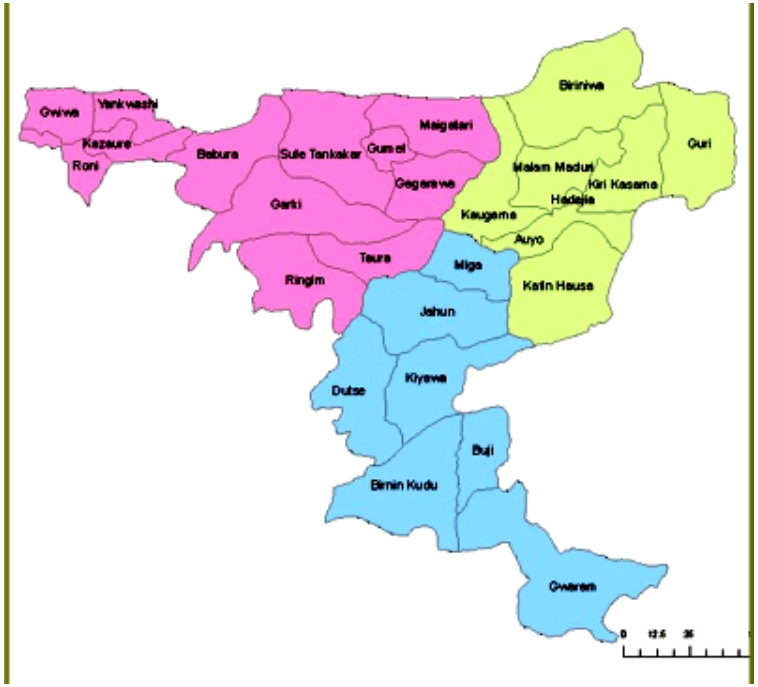
- Programme to Revitalise Routine Immunisation Northern Nigeria (PRRINN)
- Peer and Participatory Rapid Health Appraisal for Action (PPRHAA) tool to measure the quality of care in individual health facilities
  - Extensively administered across Nigeria
- Mainly used to generate a participatory and local assessment of performance
  - but used to rank facilities into high and poorly performing categories

Background

- Nigerian health system in northern Nigeria
  - Poor (inadequate resources; low coverage; high IMR and MMR)
    - but with some variation in performance at facility level
  - *What makes the difference?*
  - *What are the determinants of good performance?*

Study Aim

- To understand variation in performance of clinics operating within the same socio-political and economic environment
- To identify the determinants of clinic performance



Previous research

- Less than a handful of similar past studies
- One study by JHPIEGO in Kenya examined only high performing cases of family planning and identified five factors
  - motivation
  - knowledge and skills
  - infrastructure, equipment and supplies
  - leadership and management systems
  - client and community focus

Being abled - ‘know-what’ and ‘know-how’;
Being enabled – ‘can-do’ and ‘know-why’;
Being motivated - ‘care-why.’

Objectives

- Measure performance
  - validate PPRHAA tool and measurement
- Develop a conceptual model of the determinants of performance
- Measure and describe the determinants of performance

Design parameters

- Exploratory study
- Scale-ability and usability
  - Applied; not ‘academic’
  - ‘Good enough’ to draw attention towards key bottlenecks in low performing clinics, especially interested in the ‘human’ and ‘organisational’ determinants of clinic performance
  - Data collectable from one clinic in less than one day with two people
  - Analysis simple

Measuring clinic performance

- Performance conceptualised in terms of three dimensions:
  - **Activity**: quantity of activity; volume, range / breadth of different types of activity; and availability in terms of clinic opening times
  - **Productivity:** staff: activity ratios
  - **Quality:** clinical staff knowledge; good prescribing; continuity of care; and cleanliness and safety
- Each dimension consisted of a number of measures which were scored and weighted
- Measures and indicators selected on the basis of available data
- Maximum score = 80 [30+12+38]

Determinants of performance

- Distinction made between ‘intrinsic’ and ‘extrinsic’ factors
- Intrinsic factors: mainly located within clinic or were features of the clinic
  - 4 sets of factors:
    - Staffing levels / skills mix / experience / continuity;
    - Staff motivation and morale;
    - Clinic management / leadership; and
    - Quality of physical infrastructure (water, electricity, physical space, etc).

Determinants of performance

- Extrinsic factors were external to the clinic

- Four sets of factors:
  - Geographic/ topographical features;
  - External support and supervision;
  - Provision of supplies and medicines/vaccines; and
  - Engagement of community.

Clinic selection - purposive

- Identified based on their performance scores from PPRHAA survey as well as local knowledge
- Aim was to select a set of good and poorly performing clinics (four of each, so that n=8)
- Researchers blind to which clinics were considered high or low performing

Data collection

- Five structured tools
  - A: Routine data
  - B: Interview with Officer in Charge;
  - C: Interview with PHC workers;
  - D: Direct observation checklist; and
  - E: Self-administered / interview staff questionnaire knowledge, morale and motivation
- Each tool collected data on both performance and the determinants of performance

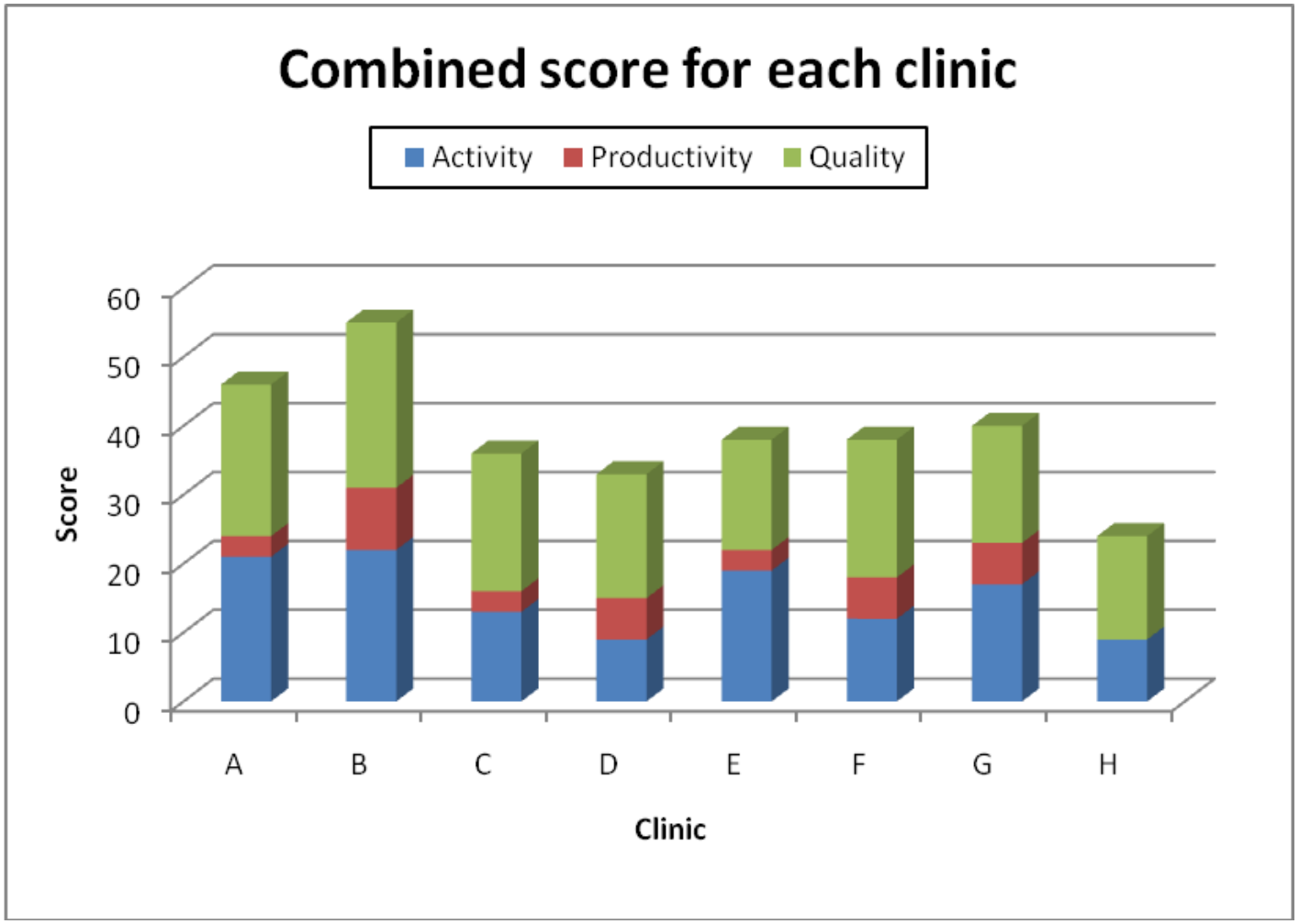
Analysis

- After measuring and scoring clinic performance, we compared the two highest and two lowest performing clinics in terms of the determinants of performance

Findings: Clinic performance

- Performance scores ranged from 24 to 55
- There were statistically significant ($p<0.05$) differences between the lowest and highest performing clinics
- The two highest and two lowest performing clinics were the same as found by the PRRHAA methodology.

Findings: Clinic performance



Findings: Determinants of performance

- Several differences
  - High performing clinics had better levels of staffing
  - Staff at high performing clinics were much less likely to say that they wanted to leave their jobs
  - Both high performing clinics had regular formal staff meetings and facility health improvement plans (unlike the two low performing clinics).

Findings: Determinants of performance

- Other trends noted:
  - Staff in the poorer performing clinics reported higher levels of stress;
  - Officers in charge of higher performing clinics had higher levels of qualifications; and
  - Staff in higher performing clinics were more likely to say that they are praised for work they do well.

Findings: Determinants of performance

- No differences observed in terms of other determinants
- Notable negatives include:
  - the presence of a high grade clinician (no clinics had a doctor);
  - average length of time staff members had worked at the clinic;
  - availability of water and electricity (uniformly poor);
  - the frequency of external supervision;
  - opinions of staff on clinics' leadership (with the exception of praise).
  - place of origin of staff

Limitations

- Lack and poor quality of routine data
  - many data missing
  - variability between what clinics collected
  - Absent staff
- Omission of indicators
  - e.g. OIC relationship with local authorities
  - No assessment of quality from patient's perspective
- Validity
  - Motivation and morale
  - Scoring system
  - Community engagement
- No multivariate analysis

Discussion

- Methodology appears robust enough to differentiate between high and low performing facilities
- Could be used to track progress and performance longitudinally, and identify clinics which require particular attention and support
- Could focus attention on some neglected aspects of health systems strengthening
  - Morale and motivation; leadership
  - Factors over which front line staff and peripheral level managers have some power and control over

Discussion

- Differences between clinics were less marked than expected
  - Limited variation in context as only one Gunduma studied
  - Inconsistencies in data
  - Bias
- Tools appear to assess the determinants of performance reasonably well
- Further work being undertaken to validate tools
- Tools have been modified in light of experience and in consultation with local health workers
- Data has now been collected from 23 clinics in 4 Gundumas in Jigawa
- Inclusion of patient satisfaction