Objective

This study aimed to assess the distribution of staff time among key clinical activities, duration of patient-provider interactions and length of different patient visits.

Methods

- Time and motion (TAM) measurements were collected at 10 out of 26 ART clinics implementing differentiated models for HIV care.
- Clinics were purposively sampled based on retention rate, geographical setting and HIV care models.
- Sensitization meetings were held to inform the clinic staff of the TAM study.
- A TAM team was formed of 4 members with each assigned to one or more service stations throughout the ART clinic to observe and record service times.
- One member recruited patients to complete patient TAM forms to measure total time spent in the clinic activities. Stata (Version 14, StataCorp LLC, College Station, TX, USA) was used to analyze the data.

Results

- We find that patient wait times are inversely related with arrival times.
- Large percentages of patients arrive before clinics open in the morning and early in the day. The average length of total patient clinic visits are inversely related with arrival times as well.
- The duration of each interaction between patients and clinic staff is limited with most interactions lasting less than 4 minutes.
- Clinic staff are spending limited amounts of their work day staffing the ART clinic where between 20% and 50% of their time is spent performing administrative and non-patient activities.
- Patient related and administrative activities are more heavily concentrated between 8AM and 12AM for clinic staff.
- Significant differences in total patient time for clinical and non-clinical visits exist — specifically in urban settings.

Conclusions

- Current patient care for ART services in Zambia suffers from inconsistencies in clinic efficiency throughout the day driven by increased congestion due to high patient volumes early in the day. This may affect the amount of time that patients can spend with clinic staff and health care providers. Differentiated models of ART delivery have potential to improve patient care. If the majority of eligible stable ART patients can be enrolled in less intensive delivery options, clinic staff may be able to spend more time on patients with acute medical needs.

Acknowledgments

Consortium: Time & Motion field study team, ART clinic members at the study clinic, members of the Centre for Infectious Disease Research in Zambia (CIDRZ), Ministry of Health (Zambia), UCSF and Bill and Melinda Gates Foundation.

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Key Findings

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