



Reaching rural youth with sexual and reproductive health and HIV services in Malawi through mobile clinics: the costs of expanding integrated services

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Background

Youth (age 15 to 24) are an important but often underserved population for HIV and reproductive health services. To address this, in rural Malawi the Family Planning Association of Malawi (FPAM) introduced both static mobile clinics providing traditional sexual and reproductive health (SRH) services, Voluntary counselling and testing (VCT) and general curative services at a modest fee. This study analyses the uptake up services in this initial period and presents the unit costs of the static and mobile clinics during the first 9 months of operation at the Ntcheu Youth Life Centre in Malawi. These baseline estimates will be used to analyse the uptake of integrated services over time and any resulting changes in cost per visit.



Ntcheu Youth Life Centre, Static Clinic, Malawi



Market Theatre Group, Ntcheu Mobile Service Delivery, Malawi

The Integra Project

This is a partnership between IPPF, LSHTM and Population Council-Nairobi to assess the benefits & costs of different models of integration of HIV and SRH services running from 2008-2012. It aims to:

- Determine the **benefits** of different integrated models to increase *range, uptake and quality* of selected SRH and HIV services.
- Determine the **impact** of different integrated services on changes in *HIV risk-behaviour*, HIV related *stigma* and *unintended pregnancies*.
- Establish the **efficiency** of using different operational models for delivering integrated services in terms of: *cost, utilization of existing infrastructure and human resources*.
- Increase utilization of research findings by policy and program decision makers through involvement of and dissemination to key stakeholders.

Methods

Financial and economic costs were collected retrospectively from October 2008 to June 2009 from the providers' perspective. The full cost of providing services in the static clinic and additional resources (incremental costs) of providing mobile services were estimated. A step-down allocation approach was used to allocate administration and support services to the static clinic services, further costs were estimated using the ingredients-based approach.

A review of clinic records was conducted in order to identify the number of visits in which a single service was delivered and those visits in which multiple services were delivered (ie; integrated visits). These data were supplemented with routine service statistics where necessary. Costs for integrated visits, in which more than one service is provided, were estimated optimistically, assuming economies of scope, with 50% staff time savings over providing two separate visits. The conservative estimates assumes the cost (and time input) is equal to the sum of providing both services separately.

Results: Total service provision by location

During the study period 2799 client consultations were provided in the static clinic and 2246 were provided in the mobile locations. In the static clinic 2% of all visits involved the delivery of more than one type of service. In the mobile setting only 1% of all visits involved the delivery of more than one service.

Table 1. Composition of FPAM services delivered in the context of a **single visit** in mobile and static clinics, Ntcheu Youth Life Centre, October 2008 to June 2009¹

| Services Delivered in a Single Visit | Static Clinic | Proportion of All Static Visits | Mobile Clinic | Proportion of All Mobile Visits |
|--|---------------|---------------------------------|---------------|---------------------------------|
| General Medical | 1245 | 44.48% | 636 | 28.09% |
| <i>** Integrated visits with General component</i> | 18 | | 18 | |
| Voluntary Counselling and Testing (VCT) | 1016 | 36.30% | 961 | 42.45% |
| <i>Integrated visits with VCT component</i> | 9 | | 0 | |
| Family Planning (FP) | 222 | 7.91% | 548 | 24.20% |
| <i>Integrated visits with FP component</i> | 21 | | 3 | |
| Sexually Transmitted Infection (STI) | 117 | 4.18% | 91 | 4.02% |
| <i>Integrated visits with STI component</i> | 17 | | 1 | |
| Pregnancy Test (PGT) | 62 | 2.22% | 2 | 0.00% |
| <i>Integrated visits with PGT component</i> | 14 | | 10 | |
| Cervical Cancer Screening (Ca Cx) | 34 | 1.21% | 0 | 0.00% |
| Other Visits* | 89 | 3.18% | 24 | 1.07% |
| Total | 2799 | 100% | 2246 | 100% |

* These integrated visits are counted in addition to the total number of visits and are counted in both categories. For example: an integrated visit involving VCT and STI treatment is counted as an integrated visit with a VCT component as well as an integrated visit with an STI component.
** Includes all visit types that individually made up less than 1% of the category total in both static and mobile sites and visits in which more than one service was delivered. Here integrated visits contribute to the total and are counted only once.

Results: expansion of mobile services over time

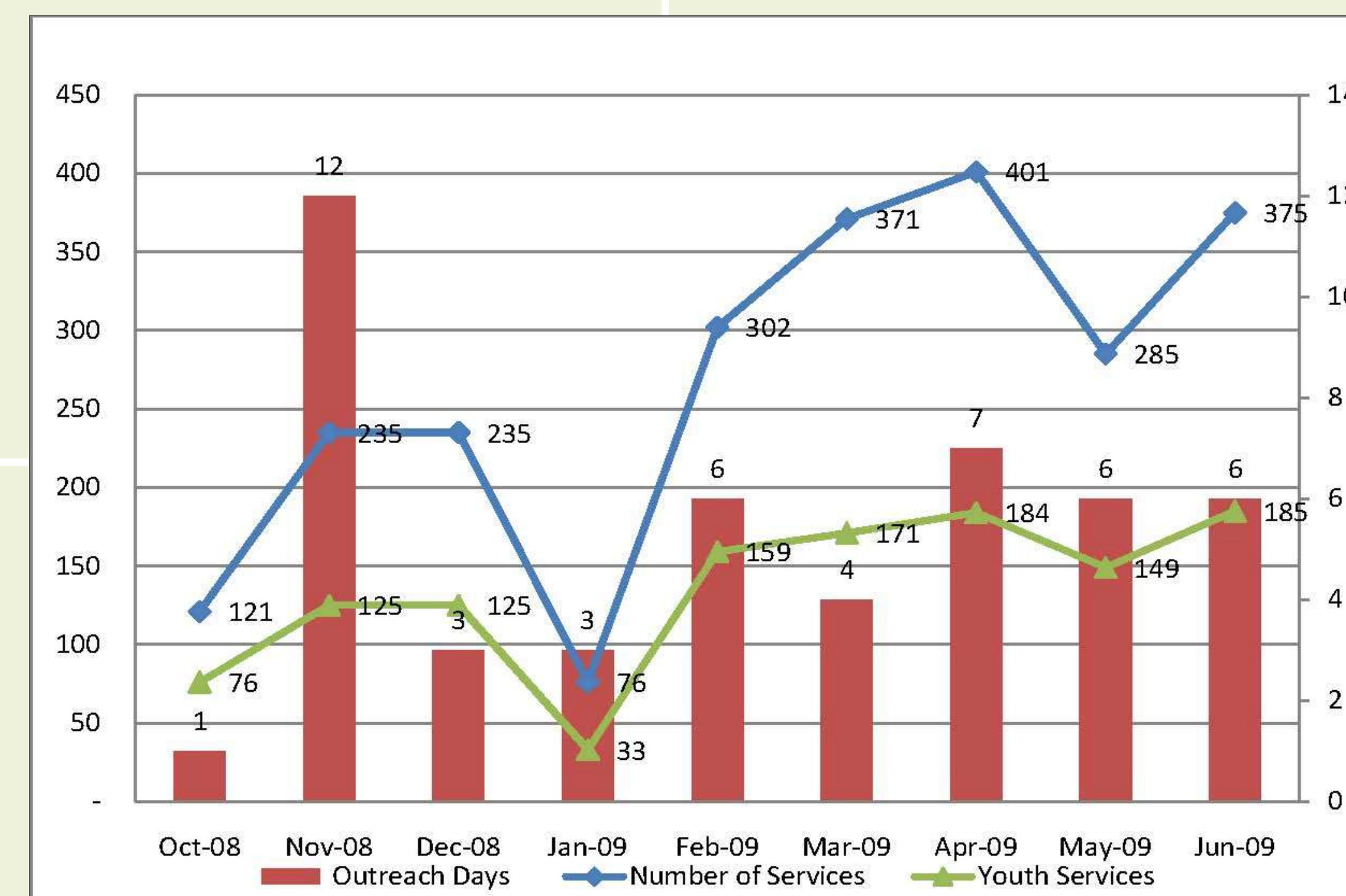


Figure 1 shows the service expansion and uptake over time. Mobile services started in October 2008 and were followed for 9 months.

On average 5 outreach events were held per month, with an average of 54 client visits per outreach day.

Roughly half of all services were provided to youth between the ages of 15 and 24. This proportion was fairly constant over the study period.

Figure 1. Monthly number of outreach events and uptake of services by all and youth, Ntcheu Youth Life Centre, October 2008 to June 2009²

Results: Average costs

The full cost per client visit in the static clinic and the additional costs needed to provide these services in mobile clinics are presented in Table 2. The general medical visits were almost twice the cost of the specialised services. This was mainly attributable to higher personnel costs associated with these types of visits which tended to take more time to complete. HIV testing and counselling was least expensive due to lower personnel costs; community reproductive health promoters (CRHPs) are primarily responsible for delivering this service.

Table 2. Average cost per service delivered in static and mobile clinics, Ntcheu Youth Life Centre, October 2008 to June 2009

| Average Cost per Service (2009 USD) | Static Clinic (Full costs) | Mobile Clinic (Incremental costs) |
|-------------------------------------|----------------------------|-----------------------------------|
| General Medical | \$ 24.97 | \$ 23.92 |
| Voluntary Counselling and Testing | \$ 6.86 | \$ 4.26 |
| Family Planning | \$ 13.15 | \$ 15.87 |
| Sexually Transmitted Infection | \$ 12.80 | \$ 7.37 |
| Cervical Cancer Screening | \$ 13.67 | N/A |

A preliminary estimation of the average cost of an integrated visit in both static and mobile clinic settings is presented in Table 3. The optimistic scenario assumes economies of scope are present, attributable to modelled personnel time savings during integrated visits, compared to the separate provision of services.

Table 3. Estimated average cost per visit with multiple services delivered in static and mobile clinics, Ntcheu Youth Life Centre, October 2008 to June 2009

| Average cost per visit with multiple services delivered (2009 USD) | Static Clinic | Mobile Clinic |
|--|---------------|---------------|
| Multiple Service Visit (Optimistic Estimate) | \$ 29.04 | \$ 23.08 |
| Multiple Service Visit (Conservative Estimate) | \$ 31.13 | \$ 27.70 |

Discussion and next steps

1. This is the first research to collect detailed data on the cost of integrated services for youth. Currently very few clients are accessing more than one service in the context of a single visit to either a static or mobile clinic.
2. In the first 9 months of service delivery service uptake has continued to increase and youth are accessing services in equal proportion other age categories, which is greatly encouraging.
3. Clinic records have been modified to incorporate observations of staff time associated with different types of visits and combinations of services. These data will allow for more detailed analysis of how staff time use changes as integration becomes more established in the static and mobile clinics and the extent to which this impacts the cost of service delivery.
4. A follow-up discrete choice experiment is being initiated in Malawi to elicit youth preferences for SRH and HIV services.
5. Improved targeting of services to youth may result in increased uptake of services by this group.

Footnotes: 1. Summarised from records review and routine monitoring and evaluation data 2. Figures obtained from routine monitoring and evaluation data only

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See other INTEGRA posters:

- THPE0821: Church, K. HIV client perspectives, Swaziland
- THPE0822: Mayhew, S. Demand for integrated services, Kenya
- THPE0770: Church, K. Provider perspectives on integration, Swaziland
- CDE1311: Obure, C. Using periodic activity reviews to analyse integration, Kenya and Swaziland
- CDE1159: Vassall, A. Framework for economic evaluation of integration, Kenya and Swaziland

