Differentiated Service Delivery in High HIV Burden Settings

A Tool for Estimating Human Resource Needs

Introduction

The adoption of the "Test and Start" strategy for achieving the 90-90-90 goals has significantly increased the number of people living with HIV/AIDS (PLHA) receiving antiretroviral therapy (ART); however, service delivery challenges remain.

Service providers have identified differentiated service delivery (DSD) models for clinically stable PLHA as a client-centered approach that simplifies and adapts services across the HIV continuum of care. DSD can reduce the burden on the health system and utilize limited human resources more efficiently.

Objectives

The tool enables facility managers (site level) and program planners (above site) to estimate human resource requirements for different DSD models, including:

- Staffing needs for implementing one or a combination of HIV service delivery models
- Efficient ART task distribution among existing health workers to implement DSD
- Configuration of DSD and task-shifting/sharing (reassigning tasks from one health worker cadre/type to another) to reduce human resource imbalances (excesses or gaps)
- Organization of site-level services to meet daily client needs (infrastructure, work hours, staffing)

Outputs from the tool enable users to make informed decisions for maximizing the use of the available workforce and to generate estimates of additional human resources needs where appropriate.

PURPOSE

To develop a simple, standardized, client-centered tool to help program managers maximize the use of their health workforce for the rollout of "Test and Start" utilizing differentiated service delivery models.

Methods

HRH2030 assessed the time it took providers to perform critical ART tasks in 20 experienced facilities providing HIV services and managing over 60,000 clients annually in Uganda. Data were collected from observing 395 clients and a total of 1,720 discrete, critical tasks related to standard care across four DSD models. The average and range of client contact times for each critical task and health worker cadre are used as benchmarks in the tool.[1] As such, the assessment was done in three ways:

1. Observation of client flows during service provision for each of the DSD models implemented and recording the steps and time an ART task takes to complete
2. Requesting various staff at the facility to fill out daily timesheets recording the amount of time they spend performing various tasks during HIV clinic days
3. Asking HIV clinic managers to estimate the average time spent to perform specific tasks

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[1] This assumes that 'experienced' ART sites have optimized service delivery processes for DSD that could serve as benchmarks.

Triangulation methods were used to obtain inputs for the tool development. A prototype of the tool was piloted in 10 facilities providing HIV services in Cameroon and Uganda and results used to further fine-tune the tool. This included sites experienced in or new to DSD in generalized epidemics and settings serving key populations.

Tool Functionality

The following inputs from users are required:
- DSD models currently implemented or planned at site or above site
- Frequency of standard and user-defined HIV-related tasks
- Assignment of health worker cadres to each task
- Number of existing health workers by cadres/types and time spent on HIV service provision
- Distribution of clients to standard care and DSD models by specific population

The tool's algorithms estimate full time equivalents (FTEs) for human resource needs utilizing the time estimates per HIV task from Uganda. The tool provides brief instructions and clearly indicates where users need to enter information. A short user guide and a comprehensive reference guide are available separately.

The tool will calculate FTEs for standard and user-defined health worker cadres for standard care and up to four DSD models to allow the optimization of available human resources for HIV service delivery. Results are shown in tables and summarized in charts comparing available FTEs to requirements. Staff shortages/surplus are shown for different scenarios: baseline, after task-shifting/sharing, after reassigning clients from standard care or a DSD model to others to reduce FTE requirements.

Tool Features and Limitations

- Clients are tested and confirmed HIV positive. Tool does not include time for HIV testing.

- Client contact times may be specific for experienced ART sites in Uganda and may need to be validated in other settings.

- HIV services may be organized differently in other countries; users can select standard tasks and define additional tasks.

- FTE calculations are based on service provider time for HIV services and client contact time per task; client waiting time is not included.

- HIV related task frequencies are determined by the user and cannot be adjusted for

individual clients or sub-populations such as adolescents or pregnant women.

- Staff travel time for out-of-facility DSD models and client tracking was not assessed in Uganda. Users could add worker travel time (tracking not applicable for all clients) as a task for certain models, but all travel times would be the same from client to client.

- Time to pre-pack drugs is not included, which may apply to group models. It could be apportioned and added similar to travel time.

- Non-HIV related services, such as maternal and child health and tuberculosis, are not included.

The implementation of differentiated HIV service delivery is rapidly evolving and global and country-specific guidance for both stable and unstable clients continues to be refined. HRH2030 therefore anticipates that the tool will evolve as DSD approaches, drug distribution methods, task-shifting and task-sharing practices, and international and country-specific policies/guidelines to support HIV treatment and care are refined and new approaches developed.