Does integration impact the costs and efficiency of delivering SRH/HIV Services?

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Background:

- Integration of HIV and SRH services may yield improvements in efficiency
  - Economies of scale:
    - Increased coverage of services - using under-utilized capacity
  - Economies of scope:
    - Shared processes such as record keeping
  - Reduction in patient costs

- Despite a clear rationale for integration, there is scarce evidence on the costs and potential efficiency gains of integrated service provision
What is the existing level of inefficiency in SRH/HIV services?
Large differences in costs per visit - minus drugs and supplies (Kenya)

- Wide variation in unit cost per visit for all services across facilities
- Least variation in family planning services and nearly 10 fold variation in unit costs of HIV care (costs ranging from US$3.88 to US$39.07 per client visit)
Large differences in costs per visit - minus drugs and supplies (Swaziland)

- Less variation in unit cost across health facilities for the different services
- Unit cost for HIV care visits range from US$3.17 to US$21.15
Finding 1

- Drugs and supplies are a large proportion of costs for many SRH/HIV services;

- However, in absolute terms there is potential for efficiency gains in both SRH/HIV services, through the better used of infrastructure and human resources
Are infrastructure and staff being fully used?
Large differences in staff workload across health facilities

Kenya

Swaziland

Average number of client visits per clinical staff member per day

Facility identifier
Large differences in capital resource use across health facilities

Intensity of use of space - Kenya

Intensity of use of space - Swaziland
Finding 2

- While in some facilities staff are likely to be overworked, there are facilities where staff are not working to full capacity
- This may in some cases due to low demand for SRH/HIV services
- If staffing clinically required, provider induced demand may be an effective way of increasing demand amongst health service users
Where has policy on integration had most impact?
Comparison between 2008-9 and 2010-11 levels of integration

### Human Resource Integration

#### Baseline (2008-2009)

#### Endline (2010-2011)

### Physical Resource Integration

### Service availability in MCH/FP unit

### Service availability in facility

- Percentage of Total Possible Range of Services

- Baseline (2008-2009)
- Endline (2010-2011)
Changes in integration by provider type between 2008-9 and 2010-11 at lower level facilities

Average Percent Change from Baseline to Endline

- Physical Resource Integration
- Human Resource Integration
- Service Availability in Facility
- Service Availability in MCH Unit

Health Centre  Sub District Hospital  District Hospital  Hospital  Public Health Unit  SRH Clinic

-40%  -30%  -20%  -10%  0%  10%  20%  30%
Range of services provided by staff at baseline may impact ability to integrate (Health Centers)
Improvements in Different Aspects of Integration

- Physical Resource Integration Improved
- Human Resource Integration Improved
- Service Availability in Facility Improved
- Service Availability in MCH Improved

Finding 3

- Integration was not scaled up uniformly
- In Kenya and Swaziland most change in physical integration happened at the health centre level.
- Initial range of services provided by staff may enable integration, but staff workload does not appear to be a factor
- Integration in the MCH unit showed the least increase, and only was possible when one of the elements of physical integration was in place.
In those facilities that have managed to integrate, have we seen any reduction in cost?
Unit cost per consultation over time

- Ca cervix screening visit
- FP visit
- PITC visit
- PNC visit
- STI visit
- VCT visit

Mean of unit cost per consultation (US$ 2011)

2009 2011
### 2008/9 costs per PITC/VCT client: Kenya

**PITC**
- Average cost per client C&T: US$ 5.71
- Average cost per client diagnosed HIV positive: US$ 46.96

**VCT**
- Average cost per client C&T: US$ 8.27
- Average cost per client diagnosed HIV positive: US$ 110.32

<table>
<thead>
<tr>
<th>Cost per visit (US$ 2009)</th>
<th>PITC</th>
<th>VCT</th>
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<tbody>
<tr>
<td>Sub District Hospital</td>
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<td>Provincial Hospital</td>
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<td>Private Clinic</td>
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<td>Health Centre</td>
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**Integra**
- Strengthening the evidence base for integrating HIV and SRH services
# Integration and costs

<table>
<thead>
<tr>
<th>Dimensions of integration</th>
<th>Correlation coefficients</th>
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<tbody>
<tr>
<td>Range of services provided per staff</td>
<td>-0.1270*</td>
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<tr>
<td>Staff workload</td>
<td>-0.1939*</td>
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<tr>
<td>Range of services provided per room</td>
<td>-0.0148</td>
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<tr>
<td>Service availability in MCH</td>
<td>0.0190</td>
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<tr>
<td>Service availability in facility</td>
<td>0.1056*</td>
</tr>
<tr>
<td>Range of services provided by staff</td>
<td>-0.1522*</td>
</tr>
<tr>
<td>Physical resource integration</td>
<td>-0.0138</td>
</tr>
<tr>
<td>Index scores</td>
<td>-0.0597</td>
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* Significant at the 5 per cent level.
Finding 4

- Unclear picture of changes costs over time and relationship with integration
- Possible relationship between some measures of integration and costs
- Need to better understand role of other factors such as facility type
- Association or causality?
  - Integration reduces costs
  - Lower cost facilities with higher demand may be less likely to integrate?
  - More efficient facilities may be better able to take on organisational change?
- Further exploration of pathways required
- Quality
Conclusions and policy implications...

- Room for efficiency improvement from integrating SHR/HIV services

- Not blueprint. Different facilities will integrate in different ways. Need to match demand for services and resources at the facility level

- Follow-up work required to further explore how facility, contextual and patient factors impact the ability to improve efficiency through integration
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