Extending Prescribing Beyond Doctors in Uganda
Opportunities and Challenges

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SA HIV Clinicians Society Conference 2014 Cape Town SA
Anatomy of the Talk

• Challenges:
  – Huge Demand for HIV care and Treatment
  – Training Demands Generated by changing guidelines/practices
  – Lack of Supportive Policies

• Opportunities:
  – Limited Doctors Numbers
  – Change in ART Treatment guidelines for Earlier Initiation
  – Increase in higher level training for nurses and allied health care worker

• Current Efforts:
  – Generating evidence: The SHARE Project
  – IT Tools to Support prescribing: The ICEA Experience at IDI
The HIV/AIDS Epidemic In Uganda Requires a More Vigorous Response

Trends in HIV Incidence by Country

Data source: UNAIDS Global Report 2012
New Infections Still High

Over 130K new infections in 2013

Drivers Include:

• High-risk Groups
  – Fisher Folks (>40% prevalence)
  – CSWs and partners
  – MSM (13% prevalence)
* 35% of new infections in self-reported monogamous relationships

• Low ART Coverage (41%)
  – Adolescents
  – PMCTC (Option B+)

Uganda New PLWHA on ART, 2003 - 2013

Programmatic Tipping Point

Ratio of new infections / net increase in ART
Tipping point: ≤1.0

Quarterly Average Client Visits by Type at IDI Clinic, Mulago

- Doctor (return visit)
- Nurse (return visit)
- Pharmacy (refill visit)
- New

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Doctor</th>
<th>Nurse</th>
<th>Pharmacy</th>
<th>New</th>
<th>Total Jan-Mar 2014</th>
<th>Total Apr-Jun 2014</th>
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<tbody>
<tr>
<td>2005</td>
<td>11367</td>
<td>2652</td>
<td>8547</td>
<td>2652</td>
<td>17829</td>
<td>19982</td>
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<tr>
<td>2006</td>
<td>16146</td>
<td>2890</td>
<td>425</td>
<td>2890</td>
<td>19915</td>
<td>21832</td>
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<tr>
<td>2007</td>
<td>15515</td>
<td>2221</td>
<td>7111</td>
<td>2221</td>
<td>19778</td>
<td>21667</td>
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<tr>
<td>2008</td>
<td>16159</td>
<td>1528</td>
<td>6975</td>
<td>1528</td>
<td>19486</td>
<td>21351</td>
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<tr>
<td>2009</td>
<td>16101</td>
<td>2014</td>
<td>10299</td>
<td>2014</td>
<td>19413</td>
<td>21287</td>
</tr>
<tr>
<td>2010</td>
<td>16302</td>
<td>2212</td>
<td>9977</td>
<td>2212</td>
<td>19230</td>
<td>21102</td>
</tr>
<tr>
<td>2011</td>
<td>17577</td>
<td>2172</td>
<td>4688</td>
<td>2172</td>
<td>19230</td>
<td>21102</td>
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<tr>
<td>2012</td>
<td>16491</td>
<td>2473</td>
<td>390</td>
<td>2473</td>
<td>18881</td>
<td>19854</td>
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<tr>
<td>2013</td>
<td>15382</td>
<td>843</td>
<td>4626</td>
<td>843</td>
<td>16829</td>
<td>17672</td>
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<tr>
<td>2014</td>
<td>11677</td>
<td>934</td>
<td>2691</td>
<td>934</td>
<td>16511</td>
<td>17345</td>
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</tbody>
</table>

- Introduced Nurse Visits
- Active Transfer-Out
Only Half of the Health Care Worker Positions are Filled!

Table 1 Approved and filled positions by trained personnel in the public health sector, October 2010

<table>
<thead>
<tr>
<th>Cadre of staff</th>
<th>Mulago Hospital</th>
<th>Butabika Hospital</th>
<th>Regional Referral Hospitals</th>
<th>District Health Offices</th>
<th>District Health Units</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Norms</td>
<td>Filled</td>
<td>Norms</td>
<td>Filled</td>
<td>Norms</td>
<td>Filled</td>
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<tr>
<td>Doctors</td>
<td>241</td>
<td>203</td>
<td>26</td>
<td>15</td>
<td>520</td>
<td>204</td>
</tr>
<tr>
<td>Clinical officers</td>
<td>45</td>
<td>56</td>
<td>12</td>
<td>14</td>
<td>395</td>
<td>261</td>
</tr>
<tr>
<td>Nurses</td>
<td>940</td>
<td>846</td>
<td>154</td>
<td>127</td>
<td>1,371</td>
<td>1,102</td>
</tr>
<tr>
<td>Midwives</td>
<td>121</td>
<td>95</td>
<td>0</td>
<td>0</td>
<td>701</td>
<td>477</td>
</tr>
<tr>
<td>Pharmacists</td>
<td>8</td>
<td>4</td>
<td>2</td>
<td>2</td>
<td>36</td>
<td>13</td>
</tr>
<tr>
<td>Dispensers</td>
<td>34</td>
<td>26</td>
<td>5</td>
<td>5</td>
<td>80</td>
<td>36</td>
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<tr>
<td>Lab. scientists</td>
<td>63</td>
<td>55</td>
<td>6</td>
<td>6</td>
<td>180</td>
<td>108</td>
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<tr>
<td>Radiographers</td>
<td>33</td>
<td>28</td>
<td>2</td>
<td>3</td>
<td>53</td>
<td>35</td>
</tr>
<tr>
<td>Health assistants</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Other health related staff</td>
<td>252</td>
<td>168</td>
<td>87</td>
<td>92</td>
<td>356</td>
<td>173</td>
</tr>
<tr>
<td><strong>Grand total</strong></td>
<td><strong>1,737</strong></td>
<td><strong>1,481</strong></td>
<td><strong>294</strong></td>
<td><strong>264</strong></td>
<td><strong>3,692</strong></td>
<td><strong>2,409</strong></td>
</tr>
</tbody>
</table>

Source: Ministry of Health (March. 2011).
The Expanded Role out would not have been possibly without Task-Shifting/Sharing
HIV Medicine is a Rapidly Changing Field with Regular Revision and Updating of Guidelines: One Consequence is the Training Needs

**Roadmap of ARV guidelines**

- **2014**: 2 Updates (Feb & July)
- **2015**: 2 Updates (Feb & July)
- **2016**: 2 Updates (Feb & July)
- **2017**: 2 Updates (Feb & July)
- **2018**: 2 Updates (Feb & July)

**SOURCE**: Doherty M et al, WHO 2014
Regular Refresher Training is the Reality
Population: Doctor Ratio: Global Picture

NUMBER OF INHABITANTS PER DOCTOR


www.doctorsoftheworld.nl

Not everybody in the world can see a doctor when in need. This is even more true in areas where people suffer from famine, war and diseases. Doctors of the world aims to provide everybody in the world with at least the most essential medical care. Help the people the world is always targeting.
“Impact of task Shifting Type II for ART Delivery on Patient and Process Outcomes in Uganda”

SHARE PHE: Overview and Update

Damazo T. Kadengye, PhD (PI, CDC)
Andrew Kambugu, M.MED, FRCP (PI, IDI)

August 11, 2014
Summary of Study Design

- A randomized field intervention PHE at 8 Regional Referral Hosp.

- 2 study Arms: A clinican Arm (Doctor or clinical Officer) and Nurse Arm

- The task-shifting model will include nurse initiation

- Primary end point is VL suppression and Immunological response
In-built Drug Prescriptions

Drugs are prescribed and issued using the system, which makes stock tracking easier.
### Severity of Interaction color coded

#### HIV Drug Interactions From University Of Liverpool

You can check for details at [http://www.hiv-druginteractionslite.org](http://www.hiv-druginteractionslite.org)

<table>
<thead>
<tr>
<th>Medication</th>
<th>Co-Medication</th>
<th>HIV Drug</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rifampicin</td>
<td>Lopinavir</td>
<td>Ritonavir</td>
</tr>
</tbody>
</table>

**Interaction**

These drugs should not be coadministered

**Quality of Evidence**

High

**Summary**

Coadministration of ritonavir (100 mg twice daily) and lopinavir/ritonavir (400/100 mg twice daily) increased lopinavir Cmax (28%) and AUC (46%), and Cmin (2.2-fold). Appropriate doses of additional ritonavir in combination with lopinavir with respect to safety and efficacy have not been established.

**The Client will be monitored every week for any adverse effects**

[Click here for a detailed description](http://www.hiv-druginteractionslite.org)
Acknowledgements

• The IDC Management and Staff at IDI

• The SHARE Project Team