HIV & NCD Integration Platforms: Leveraging HIV Scale-up to Provide NCD Services in Austere Health Systems

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Delivering transformative solutions to strengthen health systems around the world
ICAP’s Global Capacity

Projects in more than 30 countries

1,780 clinicians, researchers, data scientists and operations personnel, along with financial, technical, and communications advisors

Supporting 6,000 health facilities around the world
ICAP’s Impact – HIV Services

<table>
<thead>
<tr>
<th>Count</th>
<th>Description</th>
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<tbody>
<tr>
<td>35,000,000</td>
<td>people have been tested for HIV</td>
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<tr>
<td>651,216</td>
<td>women have received antiretrovirals to prevent HIV transmission to their babies</td>
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<tr>
<td>2,500,000</td>
<td>people have been enrolled in HIV care</td>
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<tr>
<td>1,500,000</td>
<td>people have begun HIV treatment</td>
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ICAP works at every level of the health system, collaborating with national governments, district health management teams, individual health facilities, local educational institutions, and NGOs.
How We Realize Our Mission

- Large-scale, evidence-based health programs
- High-quality education and training programs
- Research
- Surveys, measurement, and impact assessment
HIV & NCD Integration Platforms: Outline

- HIV scale-up
- Integration
- Platforms
- Integrating NCD services into HIV programs
- Leveraging HIV programs to enhance NCD services
Why Leverage HIV Platforms?

- Co-located epidemics / syndemtics
- Remarkable success of HIV scale-up
- Shared systems challenges – need for continuity care for chronic illness (prevention and treatment)
- Prevalence of NCDs amongst people living with HIV
- Relative “wealth” of HIV vs. NCD programs?
Lessons from HIV Scale-up

• Use the “public health approach”
• Be realistic and innovative about health workforce constraints
• Engage civil society, private sector, faith-based organizations
• Prioritize meaningful involvement of recipients of care: “nothing about us without us”
• Rights-based approach / importance of universal coverage
• Focus on the cascade, not solely on individuals who present with symptoms
• Invest in policy-relevant data systems
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What do we mean when we say “integration”?

The challenge:

“Whilst integration is intuitively appealing, evidence of its benefits remains uncertain and evaluation is beset by lack of a common understanding of what it involves…”

- Shigayeva et al. 2010
Do we mean integrating **services** or integrating **systems** or both?

- **Integration of clinical services at the point of care**
  - HIV and TB testing, prevention and treatment services
  - MCH services and services to prevent mother-to-child transmission of HIV (PMTCT)
- **Integration of programs and systems**
  - Financing, budgeting, strategic planning
  - Procurement and logistics
  - Monitoring and evaluation systems
  - Health workforce and training plans
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What is an “HIV Platform”?

- In many LMIC, HIV programs were the first large-scale public sector continuity care initiative for chronic diseases.
- Designed to provide prevention and treatment throughout the lifecycle in the context of health systems with limited resources.
- Focused on the public health approach and developed to be delivered by non-physician clinicians, CHWs and laypeople.
- Often initially “vertical” and siloed, now more often “diagonal”
<table>
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<tr>
<th>Diagnosis and enrollment</th>
<th>Identification of risk factors, early diagnosis, opportunistic case-finding, point-of-service diagnostics, standardized diagnostic protocols</th>
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<tr>
<td>Retention and adherence</td>
<td>Appointment systems, defaulter tracking, patient counseling, expert patients, secure medication supply chains, pharmacy support</td>
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<tr>
<td>Multidisciplinary family-focused care</td>
<td>A multidisciplinary team of healthcare providers and community members delivers care in partnership with the patient and family</td>
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<td>Longitudinal monitoring</td>
<td>Health information systems have standardized and easily retrievable data</td>
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<tr>
<td>Linkages and referrals</td>
<td>There are effective links within the health facility (to lab, pharmacy, other), between facilities, and between facility and community</td>
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<td>Self management</td>
<td>Informed, motivated patients are effective managers of their own health</td>
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<tr>
<td>Community linkages and partnerships</td>
<td>There are functional partnerships between health facility-based providers and community-based groups that facilitate access to services across the care continuum</td>
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The HEART study – Implementation Science in Eswatini

- In Eswatini, the prevalence of both HIV and CVDRF is very high
- CVDRF screening and management are recommended for PLHIV but not routinely performed
- We explored:
  - The feasibility and acceptability of CVDRF screening for PLHIV
  - Integrated management within HIV clinic vs. referred management in OPD
Methods

CVDRF Screening for ART pts ≥ 40 years:
- HTN: Two BP measurements
- DM: point of care (POC) HbA1c
- High cholesterol: POC total cholesterol
- Tobacco history: self report

Subset of people screening positive for CDRF (with HTN and/or ≥ 10% ten-year CVD risk) randomized to integrated vs. referred management

Data collection:
- Screening results
- Exit interviews with screening ppts
- Time-motion studies
- Key informant interviews with HCWs
- Key informant interviews with ppts randomized to integrated vs. referred management
Results in brief

• **Screening was high-yield**
  • Of 1,826 people screened, 39% had at least one CVDRF (25% HTN, 8% HL, 5% DM, 9% tobacco)

• **Screening added ~ 11 minutes per visit**
  • Median time for visit w/o screening = 4 min; median time for visits with screening = 15 min
  • Staffing challenges = a significant barrier to screening

• **Screening (and wait time) was acceptable to patients**
  • 100% said process was acceptable; 100% would recommend to a friend or family member
  • 77% would be willing to be screened annually, even if it took more than 10 minutes

• **Improvement in HTN and DM control was seen in both integrated and referred arms**

• **Retention rates were similar**
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HIV systems

DM systems

Rabkin et al. JAIDS 2011
Leveraging HIV programs to support diabetes services in Ethiopia

Services documented at least once in the 3 most recent visits

- Blood pressure: 45% (Baseline), 80% (Follow up)
- Fundoscopic exam: 50% (Baseline), 81% (Follow up)
- Foot exam: 3% (Baseline), 56% (Follow up)
- Neurologic exam: 3% (Baseline), 82% (Follow up)
- Oral/dental exam: 6% (Baseline), 49% (Follow up)
- Assessment of visual acuity: 4% (Baseline), 49% (Follow up)

Conclusions

• Gaps and opportunities:
  • Integration of NCD prevention, screening and treatment services into HIV programs
  • Sharing lessons, strategies and tools from HIV scale up to enhance selected NCD programs
  • Potential to integrate continuity care systems for chronic diseases (infectious and non-infectious)

• Barriers
  • Funding for related implementation science research
  • Funding for NCD services
Additional Resources from the ICAP Columbia Team

- Rabkin M, Goosby E, El-Sadr WM. Lessons from HIV: How to Provide Prevention, Care and Treatment to the Millions with Cardiovascular Disease. *Scientific American* 2014.
- Rabkin M, Nishtar S. Scaling up chronic care systems: leveraging HIV programs to support non-communicable disease services. *J Acquire Immune Defic Syndr* 2011; 57:S77-90. PMID: 21857304
Thank You