REDUCING MORTALITY FROM HIV/TB IN HOSPITALISED PATIENTS

AWACC-2012
DURBAN
Dr. Henry Sunpath
Overview

1. The challenges of early diagnosis and treatment of TB - high mortality in PLHV

2. OPERATIONALISING IMMEDIATE ART TO REDUCE MORTALITY IN TB & other OIs - THE EVIDENCE
The challenge of numbers...and delayed presentation
EARLY DIAGNOSIS AND TREATMENT...

THE LARGE NUMBER OF SMEAR NEGATIVE TB PATIENTS & LIMITED INFRASTRUCTURE START TB TREATMENT ASAP.

LINKING DISCHARGED PATIENTS TO CARE FOR HIV/TB COINFECTION
Sputum smear for acid-fast bacilli is usually negative in patients with HIV and culture-positive TB
Algorithm for the diagnosis of tuberculosis in seriously ill HIV-positive patient

Seriously ill patient with cough 2–3 weeks and danger signs

- Referral to higher level facility
  - Parenteral antibiotic treatment for bacterial infection
    - Sputum AFB and culture
    - HIV test
    - CXR

- Immediate referral not possible
  - Parenteral antibiotics for bacterial infection
    - Consider treatment for PCP
    - Sputum AFB and culture
    - HIV test

  - HIV+ or unknown
    - AFB-positive
      - Improvement after 3–5 days
      - Reassess for tuberculosis
    - AFB-negative
      - No improvement after 3–5 days
      - Start TB treatment
        - Complete antibiotics
        - Refer for HIV and tuberculosis care

Reassess for other HIV-related disease

The danger signs include any one of: respiratory rate >30/min, fever >39 °C, pulse rate >120/min and unable to walk unaided.
1. Compared to smear - the Xpert MTB-RIF assay rapidly diagnoses more (but not all) patients with culture-positive in high prevalence settings.


2. A normal CRP is useful to rule out TB in ambulant patients

Performance of serum C-reactive protein as a screening test for smear-negative tuberculosis in an ambulatory high HIV prevalence population

• D Wilson, M Badri, G Maartens - PloS one, 2011 - dx.plos.org
A. Recent developments...


   “As many as 44% of documented deaths, the majority within 6 months of ART initiation. HIV-infected patients in South Africa entering ART programs have prevalent TB rates of 20-25%, associated with a greater than two-fold mortality risk”

2. High mortality in post mortem study due to TB

Edendale post mortem diagnosis by TB status [n = 240]

- Tuberculosis 68%
- *61% of TB cases on Rx diagnosed during final admission
- 14% of positive cultures MDRTB

B. Recent developments

3. Implementing the inpatient WHO SNTB algorithm saves lives and gets patients home sooner...

Use of a WHO-recommended algorithm to reduce mortality in seriously ill patients with HIV infection and smear-negative pulmonary tuberculosis in South Africa: an observational cohort study

Timothy H Holtz, Gaëtan Kabera, Thuli Mthiyane, Tainos Zingoni, Sidhambaram Nadesan, Douglas Ross, Jennifer Allen, Sekai Chideya, Henry Sunpath, Roxana Rustomjee

<table>
<thead>
<tr>
<th></th>
<th>Standard practice N = 338/619</th>
<th>WHO algorithm N = 187/3424</th>
</tr>
</thead>
<tbody>
<tr>
<td>On TB Rx</td>
<td>46%</td>
<td>100%</td>
</tr>
<tr>
<td>In hospital after 7 days</td>
<td>38%</td>
<td>27%</td>
</tr>
<tr>
<td>Alive after 8 weeks</td>
<td>68%</td>
<td>83%</td>
</tr>
</tbody>
</table>

*Lancet Infect Dis 2011; 11: 533–40*
Inclusion criteria were

- Age > 15 years
- HIV-infection,
- Signs of being clinically seriously-ill,
- Cough > 2 weeks,
- Radiographic abnormalities consistent with TB, and
- At least two negative sputum smears.
1. Lowering the risk of hospitalization at 7 days after admission by 30%

2. Improving the “risk” of survival at 8 weeks after admission by 23%

Reduced mortality benefit highest in those
= in whom anti-TB treatment was started within 3 days
= with no history of previous TB treatment
= on current ART
The Zone of Uncertainty

- Seriously ill + Ambiguous disease process compatible with TB
- Unable to obtain specimen OR Smear/Xpert test negative
- Intense time pressure + No access to specialist advice

TB or not TB?
EARLY DIAGNOSIS AND TREATMENT...

THE LARGE NUMBER OF SMEAR NEGATIVE TB PATIENTS & LIMITED INFRASTRUCTURE START TB TREATMENT ASAP.

LINKING DISCHARGED PATIENTS TO CARE FOR HIV/TB COINFECTION
Linkage to care after inpatient stay
How many patients with TB have access to ART?
Linkage into care from hospital
KwaZulu-Natal, South Africa (2006/7)

49 participants
Median CD4 = 42
TB 76%
PCP 8%
Chronic diarrhoea 8%
CM 6%
Toxoplamosis 4%

27% died before ART
41% initiated ART
8% loss to follow-up
24% alive and still pre ART.

Murphy, Sunpath Int J Tuberc Lung Dis 2010;14:903
Result - The patients with the most advanced disease (CD4 count <50/mm³) were least likely to initiate ART by 6 months.

Patient Trajectory After Discharge

- 20 (41%) Initiated ART
- 13 (27%) Died Prior to ART
- 12 (24%) Alive, Remain Pre-ART
- 4 (8%) Lost to follow-up

49 Patients Enrolled

* 1 patient died during ART
GOALS OF THE ART PROGRAMME -2012

*About treating the sickest patients*

- Achieve best health outcomes in most cost-efficient manner
- To prioritise ART for patients with CD4 < 200 or with severe disease irrespective of CD4
- To prioritise ART for patients coinfected with TB/HIV
- Avert AIDS-related deaths and expedite ART for hospitalised patients
Why no ART preparation for inpatients?

Sithole Z. Strategies to meet the demand for palliative care in South Africa due to the HIV epidemic. 2nd APCA Palliative Care Conference, Nairobi, Kenya, Ab0147, 2007

1. No link between inpatient and outpatient programmes
HIV and AIDS services are delivered by well-funded but separate vertical programmes and people with HIV in the medical wards sometimes fall through the cracks.

“In the medical wards they feel ‘I don’t really deal with it because it’s somebody else’s problem,’”

2. Inpatient care has become a game of “MAKING BEDS“
“Finding beds for patients and then emptying the beds for the next huge influx of patients for care has become a priority at the hospital- the major concerns of the nurse managers – distracting them from other matters.

And if you look at the interns that provide most of the medical care, that’s how they are sort of evaluated, “how fast can you get the patient [out], how fast can you empty those beds?”
Factors that influenced the type of care...

**Care is very depersonalised.**

This is mainly due to the time constraints in the setting of increased patient numbers.

“Patient care is simply not how medical staff and nursing staff are evaluated. HIV/AIDS care is not integrated to involve a trained multidisciplinary team” concluded Penn-Kekana,
Barriers to good care

- **Poverty/Economic**
  - Transportation
  - Food Insecurity
  - Disability Grants
  - Poor social support

- **Institutional**
  - Long wait times
  - Negative staff experiences
  - Linkage to care after testing
  - Poor health literacy
  - Limited substance abuse treatment and mental health facilities

- **Political-Migration**

- **Sociocultural**
  -- Perceived stigmatization resulting in delayed presentation
  - Traditional healers
  - Traditional beliefs about HIV/AIDS
  - Influence of charismatic churches

Kagee J Health Psysyhol, Global Public Health 2010
Western Cape
Overview

1. The challenges of early diagnosis and treatment of TB - high mortality in PLHV

2. OPERATIONALISING IMMEDIATE ART TO REDUCE MORTALITY IN TB & other OI.s - THE EVIDENCE
In SA 500,000 need ARV’s EACH year

200,000 well on ARV’s

300,000 dead (advanced disease with coinfections) many in the hospitals!

200,000 well on ARV’s
ART outcomes - good news

- National programmes reporting good outcomes
- About 1.5 m on treatment
- 1 year survival estimated as 93-95% and 2 year survival 91% in outpatient setting

**CAN WE REDUCE MORTALITY IF WE INITIATE IMMEDIATE ART?**
When to start ART after recent diagnosis of OI?

Several recent and ongoing clinical trials
# Co-treatment of OI and ART

<table>
<thead>
<tr>
<th>Potential challenges</th>
<th>Potential benefits</th>
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<tbody>
<tr>
<td>IRIS</td>
<td>Reduced HIV progression</td>
</tr>
<tr>
<td>Co-toxicities</td>
<td>Reduced mortality</td>
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<tr>
<td>Drug-drug interactions</td>
<td>Clearance of OI</td>
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<tr>
<td>Absorption</td>
<td>Prevent OI recurrence</td>
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<tr>
<td>Pill burden</td>
<td>Prevent re-admission</td>
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<td>Adherence counseling</td>
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</table>
WHEN TO START IN THOSE WITH HIGHEST RISK OF MORTALITY?

- Within one week
-Within Two weeks
- After two weeks
- Upon admission before OI treatment

AFTER COMPLETION OF OI TREATMENT
Randomised strategy trials of ART timing during OI treatment

Observational studies

Operational research
TB

ART timing and major outcomes in patients with TB and CD4 < 50

Death 40% ↓

Death/AIDS 42% ↓

Death/AIDS 68% ↓

* CAMELIA data represents all patients in trial, majority had CD4 < 50 (median CD4 =25)
<table>
<thead>
<tr>
<th>Study</th>
<th>Inclusion criteria</th>
<th>Time to ART after TB treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>The CAMELIA study Cambodia-Blanc et al, 18th IAS Conference 2010, Abstract THLBB106</td>
<td>Smear positive TB and CD4 ≤ 200 cells</td>
<td>2 weeks vs 8 weeks</td>
</tr>
<tr>
<td>ACTG 5221 STRIDE study Havlir et al, 18th Conference on Retroviruses and Opportunistic Infections, Abstract 38</td>
<td>Confirmed or suspected TB and a CD &lt; 250 cells</td>
<td>2 weeks vs 8-12 weeks.</td>
</tr>
<tr>
<td>SAPiT study Abdool Karim et al, 18th Conference on Retroviruses and Opportunistic Infections, Abstract 39LB</td>
<td>Confirmed or suspected TB and a CD &lt; 500 cells</td>
<td>4 weeks after starting treatment vs 4 weeks of the completion of intensive phase</td>
</tr>
</tbody>
</table>
CAMELIA, STRIDE and SAPiT trials

Comparing immediate versus early ART:

- **TB-IRIS** was more frequent in the immediate arm in all 3 studies (2-5 x)
- **ART drug switches** were more frequent in immediate arm in SAPiT
- **Grade 3 or 4 toxicities** were not more frequent in the immediate arm in STRIDE
OTHER OIs

ACTG A5164 trial-2009
Multicenter: United States and South Africa

Treatable OI or Bacterial infection with CD4 < 200
n = 282
Median CD4 = 29
92% ART naïve

Randomised 1:1 (Stratified by infection and CD4 count)

ART within 14 days (Median: 12 days)

ART deferred until after OI treatment (Median: 45 days)

50% REDUCTION IN MORTALITY

Followed 48 weeks from study entry

Entry infection
PCP 63%
Cryptococcus 12%
Bacterial 12%
Toxo
TB excluded

Zolopa, PLoS ONE 2009;4:e5575
Grant, PLoS ONE 2010;5:e11416
ART after other OIs


- PCP
- Toxoplasmosis
- Cryptococcal meningitis
- Bacterial pneumonias
ART after other OIs

• Giseppe M, Antonio C, Setti M et. al. Complete Remission of AIDS/Kaposi’s Sarcoma after Treatment with a Combination of Two Nucleoside Reverse Transcriptase Inhibitors and One Non-NucleosideReverse Transcriptase Inhibitor. AIDS 2002; 16: 304-305.


When to start ART?

• In general, earlier ART improves outcome particularly in those with the lowest CD4 counts.

• A5164 results support ART **2 weeks after** diagnosis of range of non-TB infections.

• In TB, studies favor ART **within 2 weeks (IMMEDIATE ART)** if CD4 < 50. If CD4 > 50 could defer until 2 months.

• Neurologic OIs are an exception, and timing of ART **requires special consideration.**

CRYPTOCOCCAL MENINGITIS and TBM
In individuals with acute opportunistic infections, prompt initiation of ART has been confirmed to reduce mortality. Benefits are assumed to outweigh risks at all stages of HIV infection.

Exceptions -:
1. Cryptococcal meningitis, for whom early HIV treatment has been shown to increase mortality.
2. Tuberculous meningitis, for whom the optimal timing of treatment is still unclear what to start.
OPERATIONAL RESEARCH-2006-2009
Mc Cord- Siyaphila (SYP)-in patient unit for PLHIV
Operationalizing Early Inpatient ART during Hospitalization with Acute OI

Sunpath H, et al. CROI 2011. #1079


• ART as part of inpatient care to pts with OI

• 11/2006 to 8/2007- of 1126 pts admitted

• 382 prospectively enrolled (Pulm TB 39%; EPTB 25%; CrM 10%, chronic diarrhea 9% others-Toxo)

• Median time from admission to ART: 14 d (IQR 11-18)

• Median CD4 count at initiation 43 cells/mm3 and median increase by 6 months -100 cells/mm3
382 Initiated immediate ART

- 97 Died during 24-week follow-up
  - 22 Died during inpatient ART initiation
  - 80 Died after ART initiation and discharge
  - 19 Changed service provider before 24 weeks
- 19 Were lost to follow-up
- 247 Assessed at 24 weeks

97 Died during 24-week follow-up
<table>
<thead>
<tr>
<th>Clinical characteristics</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median baseline CD4 count (cells/ul) [IQR]</td>
<td>33(12-78)</td>
</tr>
<tr>
<td>Baseline CD4 cell count category (%)</td>
<td></td>
</tr>
<tr>
<td>0-49 cells/ul</td>
<td>224(62)</td>
</tr>
<tr>
<td>50-99 cells/ul</td>
<td>65(18)</td>
</tr>
<tr>
<td>100-199 cells/ul</td>
<td>22(15)</td>
</tr>
<tr>
<td>200-349 cells/ul</td>
<td>18(5)</td>
</tr>
<tr>
<td>Pulmonary tuberculosis</td>
<td>147 (39)</td>
</tr>
<tr>
<td>Extrapulmonary tuberculosis (including meningitis)</td>
<td>96 (25)</td>
</tr>
<tr>
<td>Cryptococcal meningitis</td>
<td>40 (10)</td>
</tr>
<tr>
<td>Chronic diarrhea (&gt;14 days)</td>
<td>35 (9)</td>
</tr>
<tr>
<td>Bacterial pneumonia</td>
<td>11 (3)</td>
</tr>
<tr>
<td>Toxoplasmosis gondii</td>
<td>9 (2)</td>
</tr>
<tr>
<td>Pneumocystis jirovecii pneumonia</td>
<td>5 (1)</td>
</tr>
<tr>
<td>HIV-associated kidney disease</td>
<td>4 (1)</td>
</tr>
<tr>
<td>Other cause for admission in ART-eligible patient</td>
<td>20 (5)</td>
</tr>
<tr>
<td>Undiagnosed OI</td>
<td>15 (3)</td>
</tr>
</tbody>
</table>
## Timing of ART initiation

<table>
<thead>
<tr>
<th>Days from admission with OI to ART by category, no. (%)</th>
<th>N=382</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-7 days</td>
<td>15 (4)</td>
</tr>
<tr>
<td>8-14 days</td>
<td>181 (47)</td>
</tr>
<tr>
<td>15-21 days</td>
<td>105 (26)</td>
</tr>
<tr>
<td>&gt;21 days</td>
<td>62 (16)</td>
</tr>
</tbody>
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## 24-week Virologic Outcomes

<table>
<thead>
<tr>
<th>Viral suppression &lt;400 c/mL no., (%)</th>
</tr>
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<tbody>
<tr>
<td>Intent-to-treat (ITT)</td>
</tr>
<tr>
<td>As-treated (AT)</td>
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## 24-week Immunologic Outcomes

<table>
<thead>
<tr>
<th>Median CD4 count improvement (cells/ul) (IQR)</th>
</tr>
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<tbody>
<tr>
<td>100 (48-188)</td>
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</tbody>
</table>


## 24-week Vital Outcomes

<table>
<thead>
<tr>
<th>Outcome</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall mortality (%)</td>
<td>97 (25)</td>
</tr>
<tr>
<td>Mortality prior to discharge in the step-down facility</td>
<td>20/102</td>
</tr>
<tr>
<td>Mortality after discharge</td>
<td>77/102</td>
</tr>
<tr>
<td>Among patients who died, median days to death, (IQR)</td>
<td>33 (9-95)</td>
</tr>
</tbody>
</table>

## 24-week Program Outcomes

<table>
<thead>
<tr>
<th>Outcome</th>
<th>N (%)</th>
</tr>
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<tbody>
<tr>
<td>Loss to follow-up (%)</td>
<td>19 (5)</td>
</tr>
<tr>
<td>Changed service provider (%)</td>
<td>19 (5)</td>
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</table>

## Serious IRIS Events

<table>
<thead>
<tr>
<th>Event</th>
<th>N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>IRIS events, no. (%)</td>
<td>17 (4)</td>
</tr>
<tr>
<td>Tuberculosis</td>
<td>14/17</td>
</tr>
<tr>
<td>Cryptococcal meningitis</td>
<td>2/17</td>
</tr>
<tr>
<td>Hepatitis B virus</td>
<td>1/17</td>
</tr>
<tr>
<td>IRIS-associated deaths (^5)</td>
<td>5 (1)</td>
</tr>
</tbody>
</table>
## Multivariate analysis

<table>
<thead>
<tr>
<th>Description</th>
<th>N</th>
<th>24-Week Mortality no. (%)</th>
<th>Univariate Odds Ratio 95% CI</th>
<th>Multivariate Odds Ratio 95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>382</td>
<td>25%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender-female -male</td>
<td>184</td>
<td>49 (26)</td>
<td>0.9 (0.6-1.5)</td>
<td>1.0 (0.6-1.7)</td>
</tr>
<tr>
<td></td>
<td>198</td>
<td>49 (25)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age -&lt;40</td>
<td>234</td>
<td>50 (21)</td>
<td>1.7 (1.1-2.7)</td>
<td>1.5 (0.9-2.6)</td>
</tr>
<tr>
<td></td>
<td>148</td>
<td>47 (32)</td>
<td></td>
<td></td>
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<tr>
<td>Admitting OI Other</td>
<td>342</td>
<td>89 (26)</td>
<td>0.7 (0.3-1.6)</td>
<td>0.7 (0.3-1.7)</td>
</tr>
<tr>
<td>Cryptococcal Meningitis</td>
<td>40</td>
<td>8 (20)</td>
<td></td>
<td></td>
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## Multivariate analysis

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<tbody>
<tr>
<td>Initial CD4 cell count</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>0=49 cells/ul</td>
<td>224</td>
<td>51 (23)</td>
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</tr>
<tr>
<td>&gt;50 cells/ul</td>
<td>135</td>
<td>29 (22)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>IRIS in initial 6 months</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Absent</td>
<td>365</td>
<td>92 (25)</td>
<td>1.2 (0.3-4.6)</td>
<td>1.6 (0.5-4.8)</td>
</tr>
<tr>
<td>Present</td>
<td>17</td>
<td>5 (29)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Days to ART initiation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;21</td>
<td>301</td>
<td>68 (23)</td>
<td>2.3 (1.3-4.1)</td>
<td>2.1 (1.2-4.0)</td>
</tr>
<tr>
<td>&gt;21</td>
<td>62</td>
<td>25 (40)</td>
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*P <0.016*
During 24 weeks of follow up

Among patients who died, median days to death 33 days (IQR-9 - 95)

Among pts with CrM (ART at median of 14 d), excess mortality not observed

Longer interval between admission and ART initiation independently associated with mortality (>=21 d, OR 2.1 compared with <21 d)

Mortality by 6 months doubled in patients if ART was delayed beyond 3 weeks from OI diagnosis.
**Inpatient ART team**

**Trained HIV Counselor**
- Rapid HIV education and antiretroviral therapy adherence training
- Assistance with disease disclosure and identification of treatment supporter

**Psychologist**
- Identify concurrent mental illness including acute stress reactions, anxiety, mood disorders and HIV-associated neurocognitive disorders

**Social worker**
- Provide patients with help managing the financial costs of illness including hospitalization and loss of employment
- Discharge planning with emphasis on developing support in the home

**Nurse**
- Patient care and education, medication administration, and chart maintenance

**Doctor (Generalist / Family medicine trained in HIV medicine/ID specialist)**
- Identify antiretroviral therapy start date
- Manage drug toxicities and immune reconstitution inflammatory syndrome
- Identify need for palliative care

**Dietician**
- Nutritional assessment with focus on patients with a low body mass index, or chronic diarrhea
Follow up of patients TILL READY FOR DISCHARGE TO PHC ensures a successful outcomes

**Acute hospitalization:**
- HIV testing
- CD4 cell count measurement
- OI diagnosis and initiation of OI treatment

**Early ART criteria:**
- Age ≥18 years
- Initial response to OI therapy
- CD4 count of <200 cells/μl or <350 with TB
- Ability to take medications by mouth

**Step-down center for early ART**
- Evaluation by early ART team members (see Figure 2)
- Rapid HIV education and adherence training

**Early ART initiation:**
- Patient monitored for early ART toxicity, drug-drug interaction or IRIS
- Ongoing nutritional, psychological and peer support

**Outpatient clinic follow-up:**
- Weeks 2, 6, 10, 14, 18 and 24 after ART
- Viral load and CD4 cell count measurement at week 24
# Follow up after ART

<table>
<thead>
<tr>
<th>Potential challenges</th>
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<tbody>
<tr>
<td>IRIS- observe clinical response</td>
</tr>
<tr>
<td>Co-toxicities- serial lab tests</td>
</tr>
<tr>
<td>Drug-drug interactions</td>
</tr>
<tr>
<td>Absorption- DOT</td>
</tr>
<tr>
<td>Pill burden-DOT</td>
</tr>
<tr>
<td>Adherence counseling- ONGOING with treatment supporter</td>
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OPERATIONALISING Immediate ART TO REDUCE MORTALITY-
A feasible HOSPITAL BASED programme
EVERYONE NEEDS ACCESS TO ART

“These patients could have once been part of hospital mortality statistics BUT are now active members of their families /communities”
In SA 500 000 need ARV’s EACH year

300 000 dead (advanced disease with coinfections) many in the hospitals!

200 000 well on ARV’s
The effort to reduce mortality must be made at all stages from birth through all stages of the life of PLHV.

**Cost of inpatient programme**

STEP DOWN CARE / SUBACUTE CARE UNIT LINKED TO AN ACUTE CARE UNIT AND OUTPATIENT CLINIC THAT PROVIDES CONTINUITY OF CARE ON DISCHARGE.
How much effort is adequate to save lives and restore PLHV to work and home as fully functioning members of society?

WE NEED EQUITABLE ONGOING DISTRIBUTION OF RESOURCES TO BOTH PHC AND INPATIENT CARE.
Get involved
Conclusions...

1. Immediate ART saves lives! - International RCTSs and operational research in Durban—mortality reduction by 50% seen at 6 months)

2. Individualised approach to determine the optimal time to initiate ART.

3. Integrate services of a multidisciplinary team—that links the wards and clinic.

4. Interest by the medical practitioner to be trained—good generalist internal medicine experience/training and interest to learn clinical HIV medicine.

5. Innovate care by being able to apply principles of family medicine and palliative care effectively with ART.
Conclusions

1. **Need to TRAIN more HCWs in the MDT**
   = Deal efficiently with a very complex disease that is affected by multiple psychosocial and logistic challenges.

2. **Identify the best place to implement this model of care**
   = Ideally pts from the acute care wards may be linked to subacute care /infectious diseases ward/unit in the same department and then followed up in a clinic in the same hospital
THE ROAD AHEAD...

eThekwini DOH DIRECTIVE (31/08/12)
URGENT meeting of MEDICINE DEPT/ART MANAGERS/NSMs to develop locally appropriate SOPs for immediate ART

- Use medical ward beds or beds allocated under a trained team of medical practitioners (internal medicine/family medicine/generalists)
- HIV counsellors doing HCT and beginning the ART preparation process. MDT start support work.
- Clinical team (DOCTORS AND NURSES) deciding on time to ART initiation. Start immediate ART for all eligible patients.
- SOPs for programme in the ward and follow up of “sick” patients at the hospital clinic by the same team
- Discharge “well” patients after obtaining a clinic appointment and providing a complete summary (prescribed format)
How much effort is adequate to save lives and restore PLHV to work and home as fully functioning members of society?

**WE NEED EQUITABLE ONGOING DISTRIBUTION OF RESOURCES TO BOTH PHC AND INPATIENT CARE.**
Acknowledgements

• 1. AWACC – Durban annual update
• 2. SA HIV Clinicians Society – guidelines
• 3. DOH – presentations
• 4. HOPE/CENTRA Conference – bimonthly
• 5. HIV/TB Research programme at MCH