

GRADE tables: PICO a – Does ART provided with TB treatment at the TB clinic result in better outcomes than referring people with HIV and TB for ART in specialized HIV clinics?

Author(s): Sarah Royce, Andrew Anglemyer, Erin McCarthy **Date:** 2012-08-17

Question: Does ART provided with TB treatment at the TB clinic result in better outcomes than referring people with HIV and TB for ART in specialized HIV clinics?

Settings: Lesotho

Bibliography: Bygrave 2010

Quality assessment							No. of patients		Effect		Quality	Importance
No. of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Nurse-driven one-stop shop to deliver TB and ART	Referral for ART	Relative (95% CI)	Absolute		
TB treatment success												
1	observational studies	serious ^{1,3}	no serious inconsistency	serious indirectness ³	no serious imprecision	none	214/306 (69.9%)	160/246 (65%)	RR 1.08 (0.96 to 1.21)	52 more per 1000 (from 26 fewer to 137 more)	⊕○○○ VERY LOW	CRITICAL
ART receipt among eligible patients												
1	observational studies	serious ²	no serious inconsistency	serious indirectness ³	no serious imprecision	none	174/225 (77.3%)	131/151 (86.8%)	RR 0.89 (0.81 to 0.98)	95 fewer per 1000 (from 17 fewer to 165 fewer)	⊕○○○ VERY LOW	CRITICAL
ART receipt among everyone living with HIV												
1	observational studies	serious ²	no serious inconsistency	serious indirectness ³	no serious imprecision	none	174/306 (56.9%)	131/246 (53.3%)	RR 1.07 (0.92 to 1.24)	37 more per 1000 (from 43 fewer to 128 more)	⊕○○○ VERY LOW	CRITICAL

¹ Other factors may have affected treatment outcomes independent of intervention (such as receipt of ART).

² A package of interventions was implemented.

³ Before the one-stop shop, patients had to travel to the district level to start TB treatment.

Author(s): Sarah Royce, Andrew Anglemyer, Erin McCarthy

Date: 2012-08-17

Question: Does ART provided with TB treatment at the TB clinic result in better outcomes than referring people with HIV and TB for ART in specialized HIV clinics?

Settings: Malawi

Bibliography: Chifundo 2010

Quality assessment							No. of patients		Effect		Quality	Importance
No. of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	TB clinic provides ART	Referred for ART within same hospital	Relative (95% CI)	Absolute		
Receipt of ART												
1	observational studies	serious ¹	no serious inconsistency	serious ²	no serious imprecision	none	257/338 (76%)	201/456 (44.1%)	RR 1.72 (1.53 to 1.94)	317 more per 1000 (from 234 more to 414 more)	⊕○○○ VERY LOW	CRITICAL

¹ Other factors may have affected ART receipt during follow-up.

² Baseline was a referral to ART clinics within same district hospitals.

Author(s): Sarah Royce, Andrew Anglemyer, Erin McCarthy

Date: 2012-08-17

Question: Does ART provided with TB treatment at the TB clinic result in better outcomes than referring people with HIV and TB for ART in specialized HIV clinics?

Settings: Zambia

Bibliography: Dube 2010

Quality assessment							No. of patients		Effect		Quality	Importance
No. of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	TB service refers to collocated HIV clinic	TB patient referred to geographically separated site for ART	Relative (95% CI)	Absolute		
TB treatment success (cure/complete) – receiving ART												
1	observational studies	serious ¹	no serious inconsistency	serious ²	very serious ³	none	54/61 (88.5%)	27/37 (73%)	RR 1.21 (0.98 to 1.51)	153 more per 1000 (from 15 fewer to 372 more)	⊕○○○ VERY LOW	CRITICAL
TB treatment failure or death – receiving ART												
1	observational studies	serious ¹	no serious inconsistency	serious ²	very serious ³	strong association ⁴	5/61 (8.2%)	8/37 (21.6%)	RR 0.38 (0.13 to 1.07)	134 fewer per 1000 (from 188 fewer to 15 more)	⊕○○○ VERY LOW	CRITICAL
Lost to follow-up during TB treatment – receiving ART												
1	observational studies	serious ¹	no serious inconsistency	serious ²	very serious ³	none	2/61 (3.3%)	2/37 (5.4%)	RR 0.61 (0.09 to 4.12)	21 fewer per 1000 (from 49 fewer to 169 more)	⊕○○○ VERY LOW	CRITICAL

¹ No adjustment for factors affecting outcome in people living with HIV (such as CD4 count).

² Both the collocated and the geographically separated models required people with TB to be referred to specialized HIV clinics, and is thus less applicable to the question.

³ Very few cases (less than 150).

⁴ Large effect (>2.0 or <0.50).

Author(s): Sarah Royce, Andrew Anglemyer, Erin McCarthy

Date: 2012-08-17

Question: Does ART provided with TB treatment at the TB clinic result in better outcomes than referring people with HIV and TB for ART in specialized HIV clinics?

Settings: Kenya

Bibliography: Howard 2012

Quality assessment							No. of patients		Effect		Quality	Importance
No. of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	After ART introduced in TB clinics	Before	Relative (95% CI)	Absolute		
Uptake of ART 2010 versus 2008												
1	observational studies	serious ¹	no serious inconsistency	serious ²	no serious imprecision	none	19233/40069 (48%)	12426/41174 (30.2%)	RR 1.59 (1.56 to 1.62)	178 more per 1000 (from 169 more to 187 more)	⊕○○○ VERY LOW	CRITICAL
Uptake of ART 2010 versus 2009												
1	observational studies	serious ¹	no serious inconsistency	serious ²	no serious imprecision	none	19233/40069 (48%)	14380/42294 (34%)	RR 1.41 (1.39 to 1.44)	139 more per 1000 (from 133 more to 150 more)	⊕○○○ VERY LOW	CRITICAL

¹ Other interventions implemented to improve TB and HIV collaboration during the study years may have independently affected the outcome. No adjustment for any potential confounders.

² Not all TB clinics providing ART in the later period.

Author(s): Sarah Royce, Andrew Anglemyer, Erin McCarthy

Date: 2012-08-17

Question: Does ART provided with TB treatment at the TB clinic result in better outcomes than referring people with HIV and TB for ART in specialized HIV clinics?

Settings: Kenya

Bibliography: Huerga 2010

Quality assessment							No. of patients		Effect		Quality	Importance
No. of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	TB clinic providing ART	Referring for ART in HIV clinic in same hospital	Relative (95% CI)	Absolute		
TB treatment success – receiving ART												
1	observational studies	serious ¹	no serious inconsistency	no serious indirectness	no serious imprecision	none	104/137 (75.9%)	330/403 (81.9%)	RR 0.93 (0.83 to 1.03)	57 fewer per 1000 (from 139 fewer to 25 more)	⊕○○○ VERY LOW	CRITICAL
TB treatment success – off ART												
1	observational studies	serious ¹	no serious inconsistency	no serious indirectness	serious ²	none	108/164 (65.9%)	69/111 (62.2%)	RR 1.06 (0.88 to 1.27)	37 more per 1000 (from 75 fewer to 168 more)	⊕○○○ VERY LOW	CRITICAL
Receipt of ART (medium-term follow-up versus pre-intervention)												
1	observational	serious ³	no serious	serious ⁴	serious ²	strong association ⁵	137/332	26/304	RR 4.82 (3.27	327 more per 1000 (from	⊕○○○	CRITICAL

	studies		inconsistency				(41.3%)	(8.6%)	to 7.12)	194 more to 523 more)	VERY LOW	
Receipt of ART (short-term follow-up versus pre-intervention)												
1	observational studies	serious ³	no serious inconsistency	serious ⁴	serious ²	very strong association ⁶	150/325 (46.2%)	26/304 (8.6%)	RR 5.40 (3.67 to 7.94)	376 more per 1000 (from 228 more to 594 more)	⊕⊕⊕⊕ VERY LOW	CRITICAL
Receipt of ART (long-term follow-up versus pre-intervention)												
1	observational studies	serious ³	no serious inconsistency	serious ⁴	no serious imprecision	very strong association ⁶	403/514 (78.4%)	26/304 (8.6%)	RR 9.17 (6.33 to 13.28)	699 more per 1000 (from 456 more to 1000 more)	⊕⊕⊕⊕ LOW	CRITICAL

¹ Other interventions are likely to have contributed to improvements of the treatment outcomes during the five years after the change in service delivery model. There was no adjustment for factors affecting mortality in HIV infected patients (such as CD4 count).

² Few cases (<300).

³ The change in service delivery was part of a package of additional interventions likely to increase ART uptake during the study years.

⁴ Baseline was referral to ART clinics within the same district hospitals.

⁵ Large effect (>2.0 or <0.5).

⁶ Very large effect (>5.0 or <0.2)

Author(s): Sarah Royce, Andrew Anglemyer, Erin McCarthy

Date: 2012-08-17

Question: Does ART provided with TB treatment at the TB clinic result in better outcomes than referring people with HIV and TB for ART in specialized HIV clinics?

Settings: Guatemala

Bibliography: Ikeda 2012

Quality assessment							No. of patients		Effect		Quality	Importance
No. of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	ART clinic in regional TB hospital	TB hospital referring elsewhere for HIV care	Relative (95% CI)	Absolute		
Mortality at 50 weeks of follow-up												
1	observational studies	serious ¹	no serious inconsistency	serious ²	very serious ³	very strong association ⁴	29/156 (18.6%)	68/93 (73.1%)	OR 0.08 (0.05 to 0.15)	552 fewer per 1000 (from 441 fewer to 611 fewer)	⊕○○○ VERY LOW	CRITICAL
ART uptake												
1	observational studies	serious ^{1,5}	no serious inconsistency	serious ²	very serious ³	very strong association ⁴	115/156 (73.7%)	21/93 (22.6%)	OR 9.62 (5.26 to 17.57)	511 more per 1000 (from 380 more to 611 more)	⊕○○○ VERY LOW	CRITICAL

¹ There is no adjustment for factors affecting mortality (such as ART and CD4 count).

² Both pre- and post-intervention groups required patient referrals to a specialized HIV clinic.

³ Very few cases (less than 150).

⁴ Very large effect (>5.0 or <0.5).

⁵ Timing of ART initiation unknown.

Author(s): Sarah Royce, Andrew Anglemeyer, Erin McCarthy

Date: 2012-08-17

Question: Does ART provided with TB treatment at the TB clinic result in better outcomes than referring people with HIV and TB for ART in specialized HIV clinics?

Settings: South Africa

Bibliography: Kaplan 2012

Note: One of this study's 13 facilities providing both TB treatment and ART is the same clinic described in Brown 2011.

Quality assessment							No. of patients		Effect		Quality	Importance
No. of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	TB service refers to collocated HIV clinic	TB patient referred to geographically separated site for ART	Relative (95% CI)	Absolute		
TB treatment success (cure or completed)												
1	observational studies	serious ¹	no serious inconsistency	serious ³	no serious imprecision	none	4870/6649 (73.2%)	1797/2213 (81.2%)	RR 0.90 (0.88 to 0.92)	81 fewer per 1000 (from 65 fewer to 97 fewer)	⊕○○○ VERY LOW	CRITICAL
TB treatment failure												
1	observational studies	serious ¹	no serious inconsistency	serious ³	serious imprecision ²	none	121/6649 (1.8%)	35/2213 (1.6%)	RR 1.15 (0.79 to 1.67)	2 fewer per 1000 (from 3 fewer to 11 more)	⊕○○○ VERY LOW	CRITICAL
Died during TB treatment												
1	observational studies	serious ¹	no serious inconsistency	serious ³	no serious imprecision	none	485/6649 (7.3%)	128/2213 (5.8%)	RR 1.26 (1.04 to 1.52)	15 more per 1000 (from 2 more to 30 more)	⊕○○○ VERY LOW	CRITICAL
Lost to follow-up during TB treatment												
1	observational studies	serious ¹	no serious inconsistency	serious ³	no serious imprecision	none	658/6649 (9.9%)	184/2213 (8.3%)	RR 1.19 (1.02 to 1.39)	16 more per 1000 (from 2 more to 32 more)	⊕○○○ VERY LOW	CRITICAL

¹ No adjustment for potential confounders (such as ART receipt).

² Few cases (<300 cases).

³ Both the collocated and the geographically separated models required people with TB to be referred to specialized HIV clinics.

Author(s): Sarah Royce, Andrew Anglemyer, Erin McCarthy

Date: 2012-10-30

Settings: South Africa

Bibliography: Kerschberger, 2012

Quality assessment							No. of patients		Effect		Quality	Importance
No. of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Nurse-driven one-stop shop to deliver TB treatment and ART	Referral for ART to another facility	Relative (95% CI)	Absolute		
ART uptake among eligible patients												
1	observational studies	no serious risk of bias	no serious inconsistency	no serious indirectness	serious ¹	strong association ²	64/88 (72.7%) ³	74/100 (74.0%) ³	HR (1.6) (1.11-2.29)**	144 more per 1000 (from 36 more to 214 more)	⊕○○○ VERY LOW	CRITICAL

¹ Few cases (<300 cases).

² Large effect (>2.0 or <0.50)

³ Counts are reported in text, but not reflective of relative estimate of effect. Count data used in absolute effect estimates.

** Adjusted for sex, age, CD4 count and previous TB treatment initiation.

Author(s): Sarah Royce, Andrew Anglemeyer, Erin McCarthy

Date: 2012-08-17

Question: Does ART provided with TB treatment at the TB clinic result in better outcomes than referring people with HIV and TB for ART in specialized HIV clinics?

Settings: South Africa

Bibliography: Lawn 2011

Quality assessment							No. of patients		Effect		Quality	Importance
No. of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	TB diagnosis and treatment initiation in HIV clinic	Referral from TB clinic to HIV service for ART	Relative (95% CI)	Absolute		
ART initiation among patients with CD4 <50 cells/mm³ (<2 weeks)												
1	observational studies	serious ¹	no serious inconsistency	serious ²	very serious ³	very strong association ⁴	3/22 (13.6%)	1/45 (2.2%)	RR 6.14 (0.68 to 55.66)	114 more per 1000 (from 7 fewer to 1000 more)	⊕○○○ VERY LOW	CRITICAL
ART initiation among patients with CD4 <50 cells/mm³ (<4 weeks)												
1	observational studies	serious ¹	no serious inconsistency	serious ²	very serious ³	strong association ⁵	12/22 (54.5%)	5/45 (11.1%)	RR 4.91 (1.98 to 12.20)	434 more per 1000 (from 109 more to 1000 more)	⊕○○○ VERY LOW	CRITICAL
ART initiation among patients with CD4 <50 cells/mm³ (<6 weeks)												
1	observational studies	serious ¹	no serious inconsistency	serious ²	very serious ³	none	18/22 (81.8%)	20/45 (44.4%)	RR 1.84 (1.26 to 2.70)	373 more per 1000 (from 116 more to 756 more)	⊕○○○ VERY LOW	CRITICAL
ART initiation among patients with CD4 <50 cells/mm³ (<8 weeks)												
1	observational studies	serious ¹	no serious inconsistency	serious ²	very serious ³	none	20/22 (90.9%)	31/45 (68.9%)	RR 1.32 (1.04 to 1.67)	220 more per 1000 (from 28 more to 462 more)	⊕○○○ VERY LOW	CRITICAL
ART initiation among patients with CD4 <50 cells/mm³ (<12 weeks)												
1	observational studies	serious ¹	no serious inconsistency	serious ²	very serious ³	none	21/22 (95.5%)	38/45 (84.4%)	RR 1.13 (0.97 to 1.32)	110 more per 1000 (from 25 fewer to 270 more)	⊕○○○ VERY LOW	CRITICAL
ART initiation among patients with CD4 <50 cells/mm³ (more than 12 weeks)												
1	observational studies	serious ¹	no serious inconsistency	serious ²	very serious ³	strong association ⁵	1/22 (4.5%)	7/45 (15.6%)	RR 0.29 (0.04 to 2.23)	110 fewer per 1000 (from 149 fewer to 191 more)	⊕○○○ VERY LOW	CRITICAL
Likelihood of ART uptake												
1	observational studies	no serious risk of bias	no serious inconsistency	serious ²	no serious imprecision	none	250/581 (43%) ⁶	40/195 (20.5%) ⁶	HR 0.53 (0.43 to 0.66)	91 fewer per 1000 (from 65 fewer to 111 fewer)	⊕○○○ VERY LOW	CRITICAL

¹ This study does not capture data on people with HIV and TB referred from a TB clinic but who never presented to the ART clinic.

² The intervention is a specialized HIV clinic providing ART, rather than a TB clinic.

³ Very few cases (less than 150).

⁴ Very large effect (>5.0 or <0.2)

⁵ Large effect (>2.0 or <0.50)

⁶ Data not provided in text are imputed to provide absolute effects. Relative effects are adjusted estimates provided in text.

Author(s): Sarah Royce, Andrew Anglemeyer, Erin McCarthy

Date: 2012-08-17

Question: Does ART provided with TB treatment at the TB clinic result in better outcomes than referring people with HIV and TB for ART in specialized HIV clinics?

Settings: South Africa

Bibliography: Louwagie 2012

Quality assessment							No. of patients		Effect		Quality	Importance
No. of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	TB service refers to collocated HIV clinic	TB patient referred to geographically separated site for ART	Relative (95% CI)	Absolute		
ART uptake (sensitivity analysis)												
1	observational studies	serious ¹	no serious inconsistency	serious ²	no serious imprecision	none	158/333 (47.4%)	186/612 (30.4%)	RR 1.56 (1.32 to 1.84)	170 more per 1000 (from 97 more to 255 more)	⊕○○○ VERY LOW	CRITICAL
Have recorded ART referral												
1	observational studies	serious ¹	no serious inconsistency	serious ²	no serious imprecision	strong association ³	194/447 (43.4%)	132/836 (15.8%)	RR 2.75 (2.28 to 3.32)	276 more per 1000 (from 202 more to 366 more)	⊕○○○ VERY LOW	IMPORTANT
Uptake of ART												
1	observational studies	serious ¹	no serious inconsistency	serious ²	serious ⁴	strong association ³	74/105 (70.5%) ⁵	104/233 (44.6%) ⁵	HR 2.49 (1.06 to 5.88)	324 more per 1000 (from 19 more to 523 more)	⊕○○○ VERY LOW	CRITICAL

¹ There were likely to be other enhancements in the collocated facilities that were not measured.

² Both the collocated and the geographically separated models required people with TB to be referred to specialized HIV clinics.

³ Large effect (>2.0 or <0.50).

⁴ Few cases (<300).

⁵ The data reported in the text reflect all patients, not the subgroup of patients used in the adjusted relative effect estimates. The numbers reported were used in absolute effect estimates.

Author(s):

Date: 2012-08-21

Question: Does ART provided with TB treatment at the TB clinic result in better outcomes than referring people with HIV and TB for ART in specialized HIV clinics?

Settings: Zambia

Bibliography: Morse 2012

Quality assessment							No. of patients		Effect		Quality	Importance
No. of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	TB staff provides ART	Referral for ART in same facility	Relative (95% CI)	Absolute		
Enrolled in HIV Care												
1	observational studies	serious ¹	no serious inconsistency	serious ⁴	very serious ²	none	59/192 (30.7%)	45/242 (18.6%)	RR 1.65 (1.18 to 2.32)	121 more per 1000 (from 33 more to 245 more)	⊕○○○ VERY	IMPORTANT

												LOW	
Initiation of ART													
1	observational studies	serious ¹	no serious inconsistency	serious ⁴	very serious ²	strong association ³	45/192 (23.4%)	25/242 (10.3%)	RR 2.27 (1.45 to 3.56)	131 more per 1000 (from 46 more to 264 more)	⊕○○○ VERY LOW	CRITICAL	

¹ No adjustments for potential confounders.

² Very few cases (<150 cases).

³ Large effect (>2.0 or <0.50).

⁴ The comparator was a referral to ART clinic within the same health centre.

Author(s): Sarah Royce, Andrew Anglemyer, Erin McCarthy

Date: 2012-08-17

Question: Does ART provided with TB treatment at the TB clinic result in better outcomes than referring people with HIV and TB for ART in specialized HIV clinics?

Settings: Zambia

Bibliography: Muvuma 2012

Quality assessment							No. of patients		Effect		Quality	Importance
No. of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	TB service refers to collocated HIV clinic	TB patient referred to geographically separated site for ART	Relative (95% CI)	Absolute		
ART started during TB treatment												
1	observational studies	serious ¹	no serious inconsistency	serious ²	very serious ³	very strong association ⁴	55/276 (19.9%)	0/21 (0%)	RR 8.82 (0.56 to 137.92)	-	⊕○○○ VERY LOW	CRITICAL

¹ No adjustments for potential confounders.

² Both the collocated and the geographically separated models required people with TB to be referred to specialized HIV clinics.

³ Very few cases (less than 150).

⁴ Very large effect (>5.0 or <0.2).

Author(s): Sarah Royce, Andrew Anglemyer, Erin McCarthy

Date: 2012-08-17

Question: Does ART provided with TB treatment at the TB clinic result in better outcomes than referring people with HIV and TB for ART in specialized HIV clinics?

Settings: Rwanda

Bibliography: Pevzner 2011

Quality assessment							No. of patients		Effect		Quality	Importance
No. of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	TB clinic provides ART	Refers for ART	Relative (95% CI)	Absolute		
ART receipt												
1	observational studies	serious ^{1,4}	no serious inconsistency	serious ²	no serious imprecision	strong association ³	1593/2529 (63%)	296/2276 (13%)	RR 4.84 (4.34 to 5.41)	499 more per 1000 (from 434 more to 574 more)	⊕○○○ VERY LOW	CRITICAL

¹ Other interventions implemented to improve TB and HIV collaboration during the study years.

² Not all TB clinics were providing ART in later period.

³ Large effect (>2.0 or <0.5).

⁴ Not adjustment for factors affecting mortality among people living with HIV (such as ART and CD4 count).

Author(s): Sarah Royce, Andrew Anglemyer, Erin McCarthy

Date: 2012-08-17

Question: Does ART provided with TB treatment at the TB clinic result in better outcomes than referring people with HIV and TB for ART in specialized HIV clinics?

Settings: Malawi

Bibliography: Phiri 2011

Quality assessment							No. of patients		Effect		Quality	Importance
No. of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	TB officer provides ART in TB room	TB officer refers to ART clinical officer	Relative (95% CI)	Absolute		
ART receipt (2009 versus 2008)												
1	observational studies	serious ¹	no serious inconsistency	serious ²	no serious imprecision	none	775/1138 (68.1%)	758/1289 (58.8%)	RR 1.16 (1.09 to 1.23)	94 more per 1000 (from 53 more to 135 more)	⊕○○○ VERY LOW	CRITICAL
ART receipt in the first two months of TB treatment												
1	observational studies	serious ¹	no serious inconsistency	serious ²	no serious imprecision	strong association ³	434/1138 (38.1%)	221/1289 (17.1%)	RR 2.22 (1.93 to 2.56)	209 more per 1000 (from 159 more to 267 more)	⊕○○○ VERY LOW	CRITICAL

¹ Potential bias from a new policy that was instituted during the study period to start ART within two weeks after TB treatment initiation.

² Baseline was referral to an ART clinician within the same clinic.

³ Large effect (>2.0 or <0.50).

Author(s): Sarah Royce, Andrew Anglemyer, Erin McCarthy

Date: 2012-08-17

Question: Does ART provided with TB treatment at the TB clinic result in better outcomes* than referring people with HIV and TB for ART in specialized HIV clinics?

Settings: Botswana

Bibliography: Schwartz 2012

Quality assessment							No. of patients		Effect		Quality	Importance
No. of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	TB service refers to collocated HIV clinic	TB patient referred to geographically separated site for ART	Relative (95% CI)	Absolute		
Mortality during TB treatment												
1	observational studies	no serious risk of bias	no serious inconsistency	serious ²	very serious ³	none	8/79 (10.1%)	20/250 (8%)	RR 1.27 (0.58 to 2.76)	22 more per 1000 (from 34 fewer to 141 more)	⊕○○○ VERY LOW	CRITICAL
ART initiation within 60 days of starting TB treatment												
1	observational studies	serious ¹	no serious inconsistency	serious ²	serious ³	none	17/42 (40.5%)	70/143 (49%)	RR 0.83 (0.56 to 1.24)	83 fewer per 1000 (from 215 fewer to 117 more)	⊕○○○ VERY LOW	CRITICAL
ART initiation												

1	observational studies	serious ^{1,5}	no serious inconsistency	serious ²	serious ⁴	none	42/80 (52.5%)	143/259 (55.2%)	RR 0.95 (0.75 to 1.20)	28 fewer per 1000 (from 138 fewer to 110 more)	⊕○○○ VERY LOW	CRITICAL
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¹ No adjustment for potential confounders.

² Both the collocated and the geographically separated models required people with TB to be referred to specialized HIV clinics.

³ Very few cases (less than 150).

⁴ Few cases (<300 cases).

⁵ ART initiation data unavailable for all patients. The proportions reported are minimum; patients starting ART are only the patients with available ART initiation data.

Author(s): Sarah Royce, Andrew Anglemyer, Erin McCarthy

Date: 2012-08-17

Question: Does ART provided with TB treatment at the TB clinic result in better outcomes than referring people with HIV and TB for ART in specialized HIV clinics?

Settings: Democratic Republic of the Congo

Bibliography: van Rie 2008

Quality assessment							No. of patients		Effect		Quality	Importance
No. of studies	Design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	provision of ART by TB clinics	TB clinics referring out for ART	Relative (95% CI)	Absolute		
Mortality												
1	observational studies	serious ¹	no serious inconsistency	no serious indirectness	very serious ²	strong association ³	7/107 (6.5%)	74/411 (18%)	RR 0.36 (0.17 to 0.77)	115 fewer per 1000 (from 41 fewer to 149 fewer)	⊕○○○ VERY LOW	CRITICAL
ART initiation												
1	observational studies	serious ⁴	no serious inconsistency	no serious indirectness	very serious ²	strong association ³	44/107 (41.1%)	59/411 (14.4%)	RR 2.86 (2.06 to 3.97)	267 more per 1000 (from 152 more to 426 more)	□□□□ VERY LOW	CRITICAL

¹ Without a specified follow-up period for the intervention group, this study is subject to differential follow-up bias. There were no adjustments for potential confounders.

² Very few cases (less than 150).

³ Large effect (>2.0 or <0.50).

⁴ Possible confounding by other interventions implemented to improve TB and HIV collaboration during the study years.

No data available for these studies

Author(s): Sarah Royce, Andrew Anglemyer, Erin McCarthy

Date: 2012-08-17

Question: Does ART provided with TB treatment at the TB clinic result in better outcomes than referring people with HIV and TB for ART in specialized HIV clinics?

Settings: Democratic Republic of the Congo

Bibliography: Kambale

Author(s): Sarah Royce, Andrew Anglemyer, Erin McCarthy

Date: 2012-08-17

Question: Does ART provided with TB treatment at the TB clinic result in better outcomes than referring people with HIV and TB for ART in specialized HIV clinics?

Settings: Kenya

Bibliography: Mugo 2009

Author(s): Sarah Royce, Andrew Anglemyer, Erin McCarthy

Date: 2012-10-31

Question: Does ART provided with TB treatment at the TB clinic result in better outcomes than referring people with HIV and TB for ART in specialized HIV clinics?

Settings: Kenya
Bibliography: Odhiambo 2012