Criteria Grid
Best Practices and Interventions for the Diagnosis and Treatment of Hepatitis C

Best Practice/Intervention:	H. Spillane *et al*. (2012). Incidence, risk factors and causes of death in an HIV care programme with a large proportion of injecting drug users. *Trop Med Int Health*, *17*(12), 1255-1263.
Date of Review:	Thursday, October 4
Reviewer(s):	Melanie St. John

Part A

Category:	**Basic Science** ☐ **Clinical Science** ☐ **Public Health/Epidemiology** ☐ **Social Science** ☐ **Programmatic Review** ☒
Best Practice/Intervention:	**Focus:** **Hepatitis C** ☐ **Hepatitis C/HIV** ☒ **Other:** _____ **Level:** **Group** ☒ **Individual** ☐ **Other:** _____ **Target Population:** **1014 patients co-infected with HCV and injecting drug users (IDUs).** **Setting:** **Health care setting/Clinic** ☒ **Home** ☐ **Other:** _____ **Country of Origin:** **Nanning, China** **Language:** **English** ☒ **French** ☐ **Other:** _____

Part B

	YES	NO	N/A	COMMENTS
Is the best practice/intervention a meta-analysis or primary research?	☐	☐	☐	**Meta-analysis – programmatic review of incidence, risk factors and causes of death in the Guangxi CDC/MSF HIV programme**
The best practice/intervention has utilized an evidence-based approach to assess:				
Efficacy	☐	☒	☐	
Effectiveness	☒	☐	☐	
The best practice/intervention has been evaluated in more than one patient setting to assess:				
Efficacy	☐	☒	☐	

Effectiveness	☐	☒	☐	

	YES	NO	N/A	COMMENTS
The best practice/intervention has been operationalized at a multi-country level:	☐	☒	☐	The programme is specific to the Guangxi province, where HIV prevalence is estimated at 0.08% in the general population, and at 25% among IDUs.
There is evidence of capacity building to engage individuals to accept treatment/diagnosis	☒	☐	☐	High programme retention rate was achieved at 91.9% one year after ART start and 87.3% after 2 years, which is higher than overall retention estimates from 13 Asian HIV programmes.
There is evidence of outreach models and case studies to improve access and availability	☒	☐	☐	The programme engaged in intensive efforts to improve access to HIV testing and care in the area, including targeted prevention outreach activities and referral for HIV testing, as well as training of staff in prisons and detoxification centres.
Do the methodology/results described allow the reviewer(s) to assess the generalizability of the results?	☒	☐	☐	Findings could be extended to similar comprehensive, patient cost-free models of HIV care, but not to all HIV care programmes.
Are the best practices/methodology/results described applicable in developed countries?	☒	☐	☐	
Are the best practices/methodology/results described applicable in developing countries?	☒	☐	☐	As long as a similar programme is implemented (i.e. one that offers HIV counseling, testing and comprehensive care for HIV positive patients and training for health professionals).
Evidence of manpower requirements is indicated in the best practice/intervention	☐	☒	☐	
Juried journal reports of this treatment, intervention, or diagnostic test have occurred	☒	☐	☐	
International guideline or protocol has been established	☐	☒	☐	
The best practice/intervention is easily accessed/available electronically	☐	☒	☐	Available electronically for a cost at http://onlinelibrary.wiley.com/doi/10.1111/j.1365-3156.2012.03056.x/abstract.
Is there evidence of a cost effective analysis? If so, what does the evidence say? ***Please go to Comments section***	☐	☒	☐	No evidence of a cost effective analysis.

How is the best practice/intervention funded? ***Please got to Comments section***	☐	☐	☐	The Guangxi CDC/MSF HIV programme was launched by the Chinese Center for Disease Control and Prevention, in collaboration with Médecins Sans Frontières (MSF), as part of China's National Antiretroviral Therapy (ART) Program.
Other relevant criteria: ***Notable Findings***	☐	☐	☐	--**Limitations:** No discussion of cost-effectiveness of the program or manpower requirements. --The independent effect of hepatitis on patient mortality was unexplored due to the large proportion of co-infection among injecting drug users (IDUs) treated in the programme. --IDUs treated in the Nanning programme may not represent the general IDU population in terms of adherence to treatment. --**Other Notable Findings:** A total of 1671 person-years of follow-up from 1014 individuals were analyzed. The Guangxi CDC/MSF HIV programme offered a combination of HIV counselling and testing, comprehensive HIV care free of cost and training for health professionals. --88% of patients were alive and receiving HIV care 2 years after starting ART – only 9% had died. Mortality highest during initial 6 months of treatment; 68% of deaths were AIDS-related, most commonly from an infection-related cause. Proportion of deaths related to AIDS decreased over time, but non-AIDS-related deaths (cancer or hepatic disease) became more common. --Proportion of HIV patients who entered care with a CD4 count <50 cells/µl decreased over time, suggesting success in intensive efforts to improve access to HIV testing and care in the area. --As demonstrated in previous studies, factors associated with mortality in this programme were male sex, age older than 40 years old, low initial BMI and a diagnosis of tuberculosis at the beginning of therapy. Patients with poor

				adherence rates and those who initiated ART at low CD4 counts were also at higher risk of death. --The programme treated a large proportion of current or ex-IDUs, and many were co-infected with hepatitis C and B. IDUs did not experience higher mortality or attrition rates than other patients during their first 2 years of ART. IDUs may be more likely to experience accidental death from non-HIV-related causes. These findings support the notion that satisfactory treatment outcomes can be achieved in this high-risk group. --Non-AIDS-related cancer, including hepatic cancer, was responsible for the majority of non-AIDS-related deaths, indicating that the burden of hepatitis co-infection is important in this setting. Therefore, further decrease in non-AIDS-related mortality in HIV programmes will require models of care that consider hepatitis co-infection-related issues, such as ART-related hepatotoxicities, choice of ART regimen and access to hepatitis C treatments.