



**HepatoCare model of multi-disciplinary supportive and palliative care in advanced cirrhosis: A study of post-pilot real world performance**

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**Background**

Patients with advanced cirrhosis have frequent unplanned admissions, high in-hospital death rates, low advance care planning and rationalisation of medications. To combat this, “HepatoCare,” a multidisciplinary clinic with hepatology nursing, palliative care physician and clinical pharmacist has been standard of care in our Unit since 2019. We aimed to evaluate whether *HepatoCare* continued to improve outcomes for patients with advanced cirrhosis in a real-world cohort (RWC).

**Methods**

We retrospectively compared outcomes in two cohorts of 30 consecutive *HepatoCare* patients: Pilot cohort (2017-18) vs. RWC (2019-20). All had been referred to *HepatoCare* by their treating Hepatologist with advanced cirrhosis, based on a modified set of SPICT™ criteria (Table 1). The primary outcome of interest was verifying a similar unplanned admission LOS in the RWC.

Cirrhosis-specific indicators	
	Palliative-intent HCC diagnosis (palliative systemic therapy or best supportive care)
	Diuretic-resistant ascites > 6 months
	Chronic hepatic encephalopathy > 6 months
	Second episode of SBP within 12 months
	Second episode of variceal bleeding within 12 months
	Chronic, irreversible renal dysfunction (Cr > 130 mmol/L)*
	Liver transplant indicated but not suitable/feasible
General indicators	
	Irreversible condition with poor performance status
	Persistent symptoms despite optimal Hepatology care
	Patient’s priorities change focus to primarily palliative care

**Table 1.** “Referral criteria” used to identify patients with advanced cirrhosis who may benefit from Palliative Care referral (modified from the SPICT™ tool).

**Results**

The RWC and Pilot cohorts had similarly advanced liver disease (mean Child-Pugh scores 8.5 vs 8.7 P=0.79). The RWC had statistically similar but higher 1-year mortality (57% vs. 33%; P=0.12) and similar avoidance of in-hospital death (53% vs. 54%; P=0.33). Unplanned admission LOS over 18months was lower in the RWC and approached significance (293 vs. 437 days; P=0.052). ACP was formally addressed in all patients in both cohorts. For the RWC, polypharmacy (5-9 medications per patient) was similarly high (87% vs 93%; P=0.67), and these patients experienced high rates of safe deprescription of ≥ 1 medication (80% vs 63%; P=0.25) and initiation of symptom-directed medication/s (90% vs 77%; P=0.30).

**Conclusion**

Pilot studies can over-estimate effectiveness of new interventions, but we have demonstrated a similar if not improved reduction in unplanned admission LOS in a RWC of patients with advanced cirrhosis referred to the *HepatoCare* clinic. Rates of rationalised therapy, ACP and avoidance of in-hospital death remained high.