

Guideline use and barriers to guideline-concordant colorectal cancer care in Pakistan

Aashir Aslam¹, Sehar Salim Virani², Saad Ilyas¹, Muhammad Tayyab ul Hasan Siddiqui³, Fatima Shaukat⁴, Bilal Qureshi¹, Sadaf Khan¹, Munira Moosajee¹, Muhammad Rizwan Khan¹, Syed Nabeel Zafar²

¹Aga Khan University, Karachi ²Univ. of Wisconsin-Madison, USA ³Dow University Hospital, Karachi ⁴JPMC, Karachi

54 consultants surveyed	94.4% aware of a CRC guideline	75.9% use NCCN as main guideline	22.2% know the local SOSPK guideline	77.3% cite patient cost as a barrier
----------------------------	-----------------------------------	-------------------------------------	---	---

Background and methods

CRC is Pakistan's second most common cancer. Guideline-concordant care (GCC) improves survival, but real-world guideline use here has not been measured.

- Anonymous online survey, April to June 2026
- Snowball sampling; 54 of 80 responses complete
- Public vs private: Fisher's exact test

Who responded

65%17%19%

SurgeryMedical oncologyRadiation oncology

46%35%19%

PublicPrivateBoth

Awareness of guidelines (%)

NCCN	83.3%
ESMO	51.9%
NICE	44.4%
ASCO	40.7%
SOSPK	22.2%
Institutional	16.7%

Availability of CRC resources (%)

CT scan	100%
Colorectal surgery	98%
Pelvic MRI	94%
Chemotherapy	92%
Tumor board	88%
Radiotherapy	80%
Palliative care	70%
MMR/MSI testing	66%
HER2 testing	64%
Targeted therapy	61.2%
Endoscopic US	46%
KRAS/NRAS/BRAF	38.3%

Private vs public: targeted therapy 89% vs 50%; KRAS/NRAS/BRAF 69% vs 18%.

Facilitators (mean rank, 1 = top)

Free, digital access	1.78
Locally adapted guidelines	2.28
Institutional mandate	3.04
CME / training	4.20
Tumor boards	4.54
Patient financial support	5.60
Simplified summaries	6.94
Peer / mentor culture	7.64

Barriers to guideline-concordant care: private vs public practice

	% agreeing it is a barrier	Private	Public	p-value
Limited diagnostic availability		36.8	50.0	0.004*
Limited treatment availability		42.1	50.0	0.281
High patient costs		94.7	66.7	0.107
Weak institutional support		31.6	29.2	0.849
Low provider awareness		42.1	33.3	0.047*
Guidelines not locally adapted		36.8	54.2	0.372
Patient clinical & behavioral		84.2	79.2	0.130
Guideline complexity		5.3	16.7	0.369
Limited CME / training		36.8	41.7	0.730

Agree + strongly agree. Private n=19, public n=24; respondents in both sectors excluded. * p<0.05, Fisher's exact test.

Conclusions

- Awareness is high, but patient cost and clinical factors block guideline-concordant care.
- Molecular testing and targeted therapy are least available, especially in public practice.
- Priorities: free, locally adapted guidelines, better testing capacity, institutional support. Next: audit patient-level GCC.

Limitations:

small sample (n=54), convenience sampling, self-report; not nationally representative.