

Title:

How do you create Risk assessment model adoption in oncology?

Full Name:

Himaprathyusha Parupalli

Name of the Institution:

MNJIORCC Osmania Medical College

State:

Telangana

Objective of your solution: (Briefly define the primary outcome of your solution to this challenge):

Title: Predicting Treatment Default in Oncology: A Simple, Scalable Risk-Stratified Model for Resource-Limited Settings

Objective of the Solution: To develop and implement a rapid, clinically integrated risk assessment model that identifies patients at high risk of treatment default and enables targeted interventions to improve adherence, treatment completion, and outcomes in oncology care.

Describe your solution / proposal: Provide a detailed account of your solution/ proposal to this challenge. You could type your solution/ proposal here. (Disclaimer: Solution/proposal should not exceed more than 300 words.):

Treatment default is a major contributor to poor cancer outcomes in India. Patients frequently miss chemotherapy cycles due to financial, logistical, and psychosocial barriers, often returning with advanced disease.

This proposal introduces a Default Risk Score (DRS) based on key factors such as distance from treatment centre, socioeconomic status, health literacy, caregiver availability, and prior compliance behavior.

Patients are stratified into:

- High-risk
- Moderate-risk
- Low-risk

Each category is linked to predefined interventions:

High-risk: patient navigator support, frequent follow-ups, financial/social assistance linkage

Moderate-risk: reminder systems and caregiver reinforcement

Low-risk: routine care

The scoring process takes less than two minutes and can be integrated into OPD workflow using paper or digital formats.

Example: A patient traveling long distances with limited literacy is identified as high-risk and receives structured follow-up and navigation support, preventing missed chemotherapy cycles.

This model enables early identification of vulnerable patients, improves treatment adherence, and ensures efficient allocation of limited support resources.
