Title:
How to set up a successful multidisciplinary team in a cancer practice?

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

How to setup a successful MDT in cancer practice?

Ideal composition of MDT - Medical Oncologist, Surgical oncologist, Radiation Oncologist, Pathologist, Radiologist, Palliative care specialist, Onco-Psychologist, allied care specialist - dietician, counsellors, MDT-Co-ordinator. ideal composition should consist of the 'core group' as mentioned above, who will attend all the meeting, and it should consist of 'extended expert group' - such as medical gastroenterologist, surgical gastroenterologist, nephrologist, urologist, cardiologist, CTVS, Head & neck surgeon, Neurosurgeon - who can be roped in for meeting on a specific case basis.

MDT should be set-up, in such a way, it is patient centered and not disease centered. MDT decisions should, not only be based on guidelines directed treatment for that particular disease presentation. It should also factor in other factors - such as patients tolerability to Rx, level of compliance to prescribed treatment, concern for associated financial toxicity, caregivers needs & expectation, patients expectation, spiritual & emotional needs of the patients. It should be a shared-decision making, Rather than strictly imposing the MDT recommendation on the patient, the opinion of MDT should be said to the patient, and best possible treatment to be planned, based on patient consensus. Patients & attendants should be never hurried or forced to take a decision, ample time to be given to take the decision. MDT-co-ordinator and nurses can try to voice out the needs & expectations of the patients to the consultants. Instead of sharing a single plan, keeping the patients interests in mind, MDT can roll out a best possible plan, next alternative plans (like plan A, plan B, plan C) based on general consensus and also based on patient financial & other related factors. Each plan to be explained to patient, along with the pros & cons and expected benefits & risk of the plan, so that patient & attendants can plan efficiently of the available treatment options. If at all, the patients opt out of the plan advised by MDT, their decision should be honored and proper consent taken, and alternate plans can be discussed.

Key objective is to integrate the points discussed above and give plans based on patient centric approach and formulate standardized process and workflows for MDT meeting accordingly.

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.):

Standardised process & workflows for MDT meeting –

Each MDT should have a core consultant group - who attends the meeting regularly, an extended - core consultants - who are roped in based on the area of speciality, allied health care members - who take care of the non-pharmacological part. All these groups and the patients should be co-ordinated by a MDT coordinator.

The MDT co-ordinator has the main role in the active functioning of the MDT. They have to co-ordinate between patients & consultants for a smooth workflow. They have to collect reports of patients and send them to core group and any extra additional disease related specialists prior in advance to the meeting.

The workflow of MDT can be divided into three phases –
Pre-MDT planning, MDT meeting and Post-MDT execution

1. **Pre-MDT planning -**As discussed above, the co-ordinator can fix the timing & schedule of MDT, so that consultants make themselves free to attend them. The cases to be presented, their details and reports are shared beforehand to the consultants, so that they are ready to take a clear decision or ask queries + sort it out. This can reduce the potential time delay in understanding the case and sorting out the plan accordingly. At the same time, co-ordinators can engage with patients and can know their wish- what they wish from the treatment, their financial, social & emotional constraints.
2. **MDT meeting-** Board plan is taken, keeping in mind the patient as a whole and not think of the disease alone. Consultants should keep in mind the financial factors, degree of compliance, preference for cosmetic effect on body of patient, emotional & psychosocial factors. MDT coordinators can help in discussing these non-pharmacological factors of patient, to the consultants and plan to be taken accordingly, factoring all the variabilities.
3. **Post MDT - plan execution -**
   The primary consultant -can discuss the plan taken in MTB and a shared decision making to be done. Patient and care taker should be allowed to take decision without any force or compulsion. The primary consultant can help in guiding them by discussing the pros & cons and benefit & risks and financial constraints associated with treatment. Care should be taken to avoid potential delays in time, while all these process happens.

For a standardisation of MDT & to assess the effectiveness of MDT -
The minutes of the meeting to be recorded & stored. Each patient details and plan taken to be recorded. Percentage of cases, where the actual plan executed is to be noted. In cases where plan not executed, the reason for not executing the plan to be noted. Success rate of MDT to be assessed periodically with periodic internal audit. For quality control, external audit of the MDT conducted also to be done periodically. Patient feedback to be taken and the feedback given should be reviewed seriously and necessary steps should be taken to sort it out. Care should be taken that consultant are not biased based on any pharma support or based on targets fixed in the hospital.

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Objective of your solution: (Briefly define the primary outcome of your solution to this challenge):
A structured multidisciplinary cancer team is essential for the quality functioning of a cancer center. In resource-limited countries like India, it is quite challenging to establish such teams, especially in overcrowded Regional Cancer Centers. The biggest challenge in establishing MDTs is the lack of availability of skilled professionals. The shortage of trained healthcare professionals and the poor doctor-patient ratio are extremely concerning. This highlights the shortcomings in the recruitment process and the low pay scales in government-funded cancer centers. It is crucial to ensure a quality multidisciplinary team in every cancer center to achieve excellence in cancer 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.):
The list of questions is enormously large. How do we establish a successful MDT? Who should be part of the MDT? What is the concept of a bare minimum MDT and a successful MDT? How do we overcome the scarcity of resources in resource-constrained centres?

In my perspective, in a country like India with a shortage of skilled professionals, it is impossible to discuss every case in a multidisciplinary team meeting. Therefore, triaging is the first important issue that needs to be addressed. We must clearly identify which clinical cases truly require multidisciplinary discussion. Aligning everyone's schedule for discussions is difficult, and therefore timing and availability become major challenges.

Another challenge is infrastructural limitations and diagnostic difficulties, which are extremely important for quality MDT planning and discussion. One more major hurdle is the reluctance of clinicians to adopt the MDT discussion culture because of fear of losing patients, especially in the private sector. It is often seen that once an oncology patient consults a surgeon, fear of losing the patient may lead to immediate surgery, even in situations where neoadjuvant therapy could have significantly improved prognosis and outcomes.

Moreover, it is equally important that every skilled professional strictly practices within the field for which they are trained and licensed. In countries like India, we often see onco-surgeons and radiation oncologists practicing medical oncology without proper training or expertise in that field. It is crucial for governments to discourage such practices in order to reduce morbidity and mortality and improve the quality of life of cancer patients. In many remote centers, such practices lead to serious complications such as febrile neutropenia and other severe adverse events. We also frequently see patients being referred to the appropriate specialist only at terminal stages when salvage is no longer possible. This further highlights the importance of multidisciplinary teams.

A well-structured multidisciplinary team should ideally include a tumour organ-specific surgeon, medical oncologist, radiation oncologist, physician, radiologist, pathologist, dietician, psychologist, patient assistant, molecular biologist, genetic counsellor, physiotherapist, and rehabilitation specialists depending on the tumour type. However, it is impossible to maintain such a comprehensive team in many resource-constrained centres. Therefore, there should at least be a bare minimum MDT consisting of skilled professionals directly involved in patient care.

A successful MDT discussion is not determined only by the available team but also by infrastructure, resources, patient affordability, and patient willingness. Therefore, MDT planning must always be individualized and practical. It is important to overcome the problem of limited in-person availability of specialists by encouraging the concept of virtual MDTs whenever physical meetings are not feasible.

Another important recommendation is incorporating the MDT concept into the training of healthcare professionals from the beginning of their careers. MDT participation should become an essential part of medical education and training programs. Even if physical MDTs are not possible, regular virtual MDTs should be conducted to encourage trainee participation, nationwide collaboration, and educational activities that promote the culture and importance of MDT-based care.

It is equally important to train professionals to actively participate in discussions and debates. This encourages healthy academic discussions, challenges existing standards of care, stimulates new ideas, and promotes continuous improvement. This is especially important in overcrowded Regional Cancer Centers where time constraints, patient burden, and workforce shortages are major issues.

We must also encourage participation of tumor specific specialists in MDTs rather than generalized specialists. These tumor specialists should actively participate in clinical trials to ensure that the right patient receives the right treatment and the right care at the right time. Having tumor-specific experts in MDTs is a major advantage for effective cancer care. Therefore, we must focus on overcoming challenges in developing successful MDT systems, maximizing available resources, respecting fellow colleagues within the MDT, and following national and international guidelines for successful MDT functioning.

In my perspective, an ideal MDT system would involve every hospital having tumor-specific MDT teams consisting of trained tumor specialists who meet regularly, discuss cases through both physical and virtual meetings, formulate institution-specific standard operating protocols (SOPs), and regularly revise these SOPs based on institutional patient outcomes and data. There should also be third-party quality assessments of MDT functioning at regular intervals to ensure operational excellence.

It is equally important to involve hospital administrative staff in regular MDT meetings that discuss challenges and limitations in delivering quality cancer care. Such collaboration helps identify gaps in care and encourages administrative support for regular improvements, better resource procurement, and overcoming financial barriers through NGO and government scheme collaborations. This ultimately helps ensure quality infrastructure, better drug availability, and more effective MDT discussions for improved patient care.

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Objective of your solution: (Briefly define the primary outcome of your solution to this challenge):
NATIONAL V-MDT ONCOGRID Protocol
Virtual Multidisciplinary Tumor Board Network for Integrated Cancer Care
Cancer expertise in India is unevenly distributed, with certain centers specializing in hematologic malignancies, sarcomas, thoracic oncology, molecular pathology, or advanced radiation techniques. Consequently, many patients are managed without subspecialty input, leading to treatment variability and delayed optimal care.
We propose the NATIONAL V-MDT ONCOGRID Protocol, a structured nationwide virtual multidisciplinary tumor board model connecting cancer centers through secure digital platforms and standardized workflows.

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.):
Core Framework
1. Standardized Pre-MDT Workup
Participating centers follow predefined organ-specific protocols covering:

- Imaging requirements
- Histopathology review
- Molecular profiling
- Performance status assessment
- Comorbidity and financial evaluation

Clinical records, pathology slides, imaging, and treatment timelines are uploaded to a centralized AI-enabled platform before discussion.
2. National Virtual MDT Network
Weekly Zoom-based MDT meetings include:

- Medical, surgical, and radiation oncologists
- Radiologists and molecular pathologists
- Nuclear medicine specialists
- Palliative care experts
- Oncology nurses and patient navigators
- Genetic counselors and psycho-oncology support teams

Rare and complex cancers can thereby receive national-level expert review irrespective of patient geography.

3. AI-Assisted Decision Support
AI-generated summaries identify missing investigations, guideline-based options, clinical trial eligibility, toxicity risks, and affordability concerns, supporting efficient and evidence-based discussions.

4. Patient-Centered Decision Making
Final recommendations integrate:

- Survival benefit
- Quality of life
- Financial feasibility
- Treatment accessibility
- Patient preferences and goals of care

Expected Impact
The protocol aims to reduce disparities in cancer care, improve uniformity of treatment decisions, accelerate expert access, promote collaborative learning, strengthen referral pathways, and create a scalable national blueprint for multidisciplinary oncology care in resource-constrained settings.

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Objective of your solution: (Briefly define the primary outcome of your solution to this challenge):
To reduce median time from confirmed cancer diagnosis to initiation of definitive treatment by at least 50%, guideline adherence, patient satisfaction, documentation completeness, treatment completion through implementation of a standardized multidisciplinary oncology care pathway.

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.):
Problem statement: Despite multidisciplinary tumor boards being the gold standard in oncology, their implementation in routine practice is limited by shortage of specialists, lack of formal workflows, inadequate digital infrastructure, scheduling barriers, poor case coordination, and absence of patient navigation systems. There is a critical unmet need for a scalable, affordable, technology enabled, and patient centered multidisciplinary oncology care model that can integrate specialists across institutions, standardize treatment workflows, incorporate patient preferences and affordability considerations, and enable equitable access to expert cancer care in both urban and resource-limited settings.
Solution: The BRIDGE MDT (Multi-disciplinary Tumour board) model aims to address this implementation gap by transforming fragmented cancer care into a coordinated, evidence-based multidisciplinary decision making and care pathway that improves efficiency, treatment quality, access, and patient outcomes.
B — Build case capture
R — Review by multidisciplinary experts
I — Integrate diagnostics + patient priorities
D — Decide consensus treatment
G — Guide navigation + execution
E — Evaluate outcomes + re-discuss if needed
Problem Case scenario 1: A case of 14-year, Male child with suspected sarcoma in district hospital. Orthopedic surgeon performs unplanned excision. Catastrophic common real-world problem. Consequences: margin contamination, re-surgery, worse outcomes.

BRIDGE MDT solution:
Suspicious soft tissue mass identified
↓
BRIDGE red flag protocol
"No biopsy/excision without sarcoma review"
↓
Urgent sarcoma virtual MDT (Orthopedics + pathology + imaging + surgical oncology)
↓
MRI review
↓
Biopsy planning
↓
Staging
↓
Neoadjuvant plan if indicated
↓
Definitive surgery at Tertiary care center including the same surgeon who performed biopsy in the team.
Outcome:-Prevents avoidable oncologic mistakes.

Problem case scenario 2: A 50-year-old woman
Diagnosed with Locally advanced cervical cancer
Problem: Departments working independently.
Patient goes to Gynecology department → Advice radiation consultation → delay → Advice imaging → imaging wait → Medical oncology consulted late → chemo delayed. Total delay: 4-6 weeks.

BRIDGE MDT SOLUTION:
Biopsy confirmed cervical cancer
↓
BRIDGE registration
↓
Coordinator checklist for BRIDGE pathway
MRI Imaging, prechemo work up(CBC, RFTs,LFTs, Serology, Cardiac fitness) Performance status, Nutrition, Social assessment
↓
Gynec oncology MDT(Gynecologist, Radiation oncologist,Medical Oncologist, Surgical oncologist,Pathologist,Radiologist)
↓
Radiation planning
↓
Medical oncology cisplatin fitness review
↓
Palliation/nutrition review
↓
navigator support and execution
Appointment synchronization, Reminder calls
Transport assistance linkage
↓
Integrated treatment scheduling (radiation slot+chemo day)
↓
Chemoradiation starts within 7-10 days

Outcome: Improves: time to treatment, treatment completion rates, coordination, reduce treatment delays.

Problem Case scenario 3: A 42-year old woman

Diagnosed with Left breast cT2N1 HER2-positive breast cancer

Commonly encountered Problem: Patient consulted general surgeon, Planned and Immediate surgery done and then referred to medical oncologist. But here missed issues:

- HER2 positive biology
- neoadjuvant therapy indication
- financial counseling
- fertility concerns
- radiation sequencing planning

Consequences:

- Non guideline directed treatment
- poorer pathological response opportunity
- fragmented care
- delays between specialties

BRIDGE MDT solution:

Patient diagnosed with breast lump

↓

Biopsy confirms invasive carcinoma

↓

MDT coordinator captures case

(HPE + IHC + imaging + ECOG + affordability profile)

↓

BRIDGE triage

Potentially curable complex breast cancer

↓

Weekly breast MDT (Medical oncology + General surgeon/Surgical oncologist + radiation oncologist + pathology + nurse)

↓

Review HER2-positive node-positive disease

↓

Integrate patient priorities

Young mother

Wants breast conservation if possible

Concern about cost

↓

Consensus decision → Neoadjuvant anti-HER2 based therapy

↓

Navigator links financial support, NGO, Patient assisted programs

↓

Post-therapy reassessment

↓

Surgery

↓

Adjuvant radiation and Chemotherapy/Her 2 directed therapy

↓

Outcome tracking

Outcome: Without BRIDGE: Treatment start fragmented, wrong sequencing.

With BRIDGE: evidence-based care, proper sequencing, fewer avoidable visits, patient-informed decision.

Case 4: Problem:

Frail elderly patient is prescribed aggressive standard chemotherapy without geriatric consideration.

BRIDGE MDT SOLUTION:

MDT integrates comorbidities, frailty, renal function, and patient goals, Personalized care, toxicity reduction, over treatment.

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

- Deliver coordinated, multidisciplinary, and evidence-based cancer care
- Place patient values and preferences at the center of treatment decisions
- Standardize MDT workflows for timely, efficient, and accountable care
- Improve communication, continuity, and shared decision-making
- Enhance cancer outcomes through personalized and patient-centered 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.):

1. Ideal MDT-

In modern oncology, every cancer patient, for example, a woman diagnosed with breast cancer benefits most when decisions are made by a multidisciplinary team (MDT) rather than a single doctor. This team brings together different perspectives to create one unified plan.

Core members include the radiologist (defines tumour extent), pathologist (tumour biology such as ER/PR/HER2), surgeon (operability and surgical options), medical oncologist (systemic therapy), and radiation oncologist (radiotherapy planning).

Equally vital are the MDT coordinator, who ensures smooth workflow and documentation, and the clinical nurse specialist (CNS), who represents the patient's voice.

Depending on the situation, extended experts like plastic surgeons, psycho-oncologists, and palliative care teams are involved. Strong leadership and regular audit ensure quality and accountability.

2. Patient-Centered Approach Triple Loop Model

A good MDT is not just disease-focused —it is person-focused. Instead of placing the patient in a technical meeting, their values are systematically included.

Before MDT, the CNS captures what matters most to the patient —fears, priorities, lifestyle needs —and records it as a short "Patient Priority Statement".

During MDT, this is read aloud first. The team asks:

"Does our plan respect this patient's priorities?"

For example, in early breast cancer, a patient wishing to avoid chemotherapy may safely receive endocrine therapy if oncologically appropriate. If compromise is not possible, the benefit is clearly explained.

After MDT, the CNS communicates the decision within 2 days and confirms understanding using a teach-back method.

3. Standardised Workflow

An effective MDT follows a clear, time-bound workflow. Pre-MDT workup is completed promptly, and patient priorities are documented early.

During MDT, structured case presentation ensures efficient discussion.

Post-MDT, a clear treatment summary with responsibilities and next steps is generated immediately.

In real-world practice, especially in India, addressing financial constraints, travel issues, and fast-tracking aggressive cancers further strengthens outcomes.

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Objective of your solution: (Briefly define the primary outcome of your solution to this challenge):
Precision cancer care, reimagined: bespoke, flexible MDTs fueled by AI, patient partnership, ethics, trials, financial and legal support

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.):

Specialization- In modern oncology, disease-specific MDTs (e.g., Thoracic oncology, Haematooncology) enable focused expertise and greater protocol adherence.

Individualization- MDT composition must be tailored to the patient's needs. For instance, a pregnant cancer patient would require an obstetrician, fetal medicine specialist, and neonatologist in addition to the core oncology team, while a patient with Pott's spine complicating the course of cancer would need a pulmonologist and spine surgeon.

Flexibility- MDT membership should evolve with the patient's changing clinical needs. For example, in the aforementioned patient, after delivery, a fetal medicine expert may no longer be required, but if patient develops postpartum psychosis, a psychiatrist should be brought in. This ensures efficient use of expertise, time, and manpower.

Technology Integration- Incorporating AI can optimize MDT functioning through literature review, drug interaction alerts, and genomic interpretation. In complex cases, such as rare mutations on next-generation sequencing, AI can help distinguish actionable drivers from variants of uncertain significance and identify involved pathways and potential targeted therapies**.**

Patient-Centric Approach- Patients and caregivers are key stakeholders and should be actively involved in decision-making throughout the treatment journey**.**

Legal and Ethical Support- Inclusion of a legal expert and clinical ethicist strengthens areas like informed consent, conflict resolution, advance directives, end-of-life care, and experimental therapies.

Clinical Trial Expertise- A clinical trialist ensures eligible patients are offered trial participation early, as recommended by major guidelines like National Comprehensive Cancer Network.

Quality Assurance- Regular auditing of oncological outcomes helps assess MDT functioning and refine future practice.

Financial Guidance- A financial advisor can address treatment-related financial toxicity by assisting with insurance, financial planning, and government healthcare schemes.

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Objective of your solution: (Briefly define the primary outcome of your solution to this challenge):
To design a structured, patient centered multidisciplinary team framework for oncology practice that ensures every treatment decision is made collaboratively, transparently, and with the patient's goals explicitly incorporated into clinical practice.

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.):
The biggest mistake institutions make when setting up an MDT is treating it as a meeting rather than a system. A meeting can be skipped, abbreviated, or dominated by the most senior voice in the room. A system has structure, accountability, and a process that runs regardless of individual personalities. The core composition of an oncology MDT needs to include a medical oncologist, surgical oncologist, radiation oncologist, radiologist, pathologist, and a dedicated MDT coordinator. For specific tumour types, palliative care physicians, clinical geneticists, and onco-psychologists should be integrated not as optional additions but as regular participants. The pathologist and radiologist are the two most frequently undervalued members of any MDT and are often absent from discussions. That is a structural failure that directly compromises decision quality. For patient centredness to be real rather than performative, patients need a named key worker usually an oncology nurse specialist who translates MDT decisions into language patients understand, communicates their values and preferences back to the team before decisions are finalised, and ensures that what gets decided in the meeting room actually reaches the patient in a way that allows genuine informed consent. The MDT decision should be a recommendation, not a verdict. The standardized workflow should follow a clear sequence that is pre-meeting case submission with pathology and imaging available and reviewed in advance, structured presentation at the meeting, documented consensus decision with rationale, and a defined communication pathway back to the referring clinician and patient within 24 to 48 hours. Decisions must be recorded in a structured MDT database and not just in clinic letters, so that outcomes can be audited and the team can learn from its own patterns over time.

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Objective of your solution: (Briefly define the primary outcome of your solution to this challenge):
Cancer care isn't managed by one doctor anymore. A single patient might need input from medical oncologists, surgeons, radiation oncologists, radiologists, pathologists, molecular biologists, and palliative care specialists —often across different hospitals and different stages of treatment. That's exactly why multidisciplinary tumor boards exist.

But the process is still broken. Every meaningful MDT discussion demands time, coordination, and multiple specialists in one room. Understanding a single patient's full history can eat up 10-15 minutes before the real discussion even starts. Radiology needs reviewing. Pathology needs revisiting. Molecular reports need correlating. And the reasoning behind earlier decisions? Often poorly documented or completely lost.
Most MDT notes today boil down to one line: "Plan discussed in tumor board. Proceed with chemotherapy." But why was surgery avoided? Why was radiation omitted? What did the radiologist think about mesorectal fascia involvement? What concerns did the surgeon raise? That reasoning vanishes —buried across hundreds of pages of scattered reports, imaging, and fragmented notes.
This matters most in diseases like rectal cancer, where treatment pathways branch constantly. A patient might undergo upfront surgery, total neoadjuvant therapy, organ preservation, watch-and-wait, or a clinical trial. Every decision reshapes the next step. And unless the thinking behind those decisions is preserved, future clinicians are left reconstructing the story from incomplete pieces.
The cost isn't just time. It's continuity, clarity, and collective clinical intelligence.

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.):

1. Milestone: Structured Clinical Decision Platform

Milestone turns every major clinical decision into a documented checkpoint on a longitudinal timeline — sitting as a dedicated tab inside the hospital's existing system. No separate login, no new platform to learn. Structured decision-making becomes as routine as checking a patient's chart.

2. **Structured Clinical Milestones**

The patient journey unfolds as a chronological timeline from first presentation onward. Each major event — colonoscopy, biopsy, MRI, molecular testing, surgical review, postoperative pathology —has its own template built around the data that actually matters at that moment. Together, these entries form a readable clinical narrative instead of information buried across hundreds of scattered pages.

3. Multidisciplinary Decision Architecture

At major treatment decisions, MDT checkpoints are triggered and the right specialists are brought in for that specific case. Radiologists, pathologists, surgeons, and oncologists can respond via text or audio through a collapsible discussion panel —inside the same milestone, inside the same system. Real multidisciplinary input, without everyone needing to be free at the same time.

4. Preserving the Reasoning

Milestone captures not just the final plan, but what was considered, what was rejected, and where the team was uncertain. When a patient recurs two years later, the next team opens the timeline and understands the thinking —without reconstructing it from scratch.

5. Imaging in Context

Scans, slides, and operative findings attach directly to the milestone they belong to. Specialists can mark specific regions of concern, keeping the image and the interpretation together where they're actually needed.

6. AI-Assisted Documentation

An optional AI layer pre-fills templates from existing notes and records. Clinicians review and confirm — cutting documentation time without removing clinical judgment from the process.

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Objective of your solution: (Briefly define the primary outcome of your solution to this challenge):
To create a multidisciplinary cancer system where every patient receives coordinated, timely and compassionate care instead of fragmented opinions from isolated specialists.

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.):
A successful MDT begins with the right culture, not just the right people. The ideal oncology MDT should include medical, surgical and radiation oncologists, radiologists, pathologists, nuclear medicine specialists, oncology nurses, palliative-care physicians, nutritionists, psycho-oncology support, physiotherapists, social workers and tumour-board coordinators. In India, financial counsellors and palliative-care teams are equally important because affordability and symptom relief strongly influence outcomes.
The patient must remain the centre of every discussion. Decisions should not be based only on best possible treatment, but on performance status, financial reality, family support, travel burden, fertility concerns and quality of life. A scientifically correct plan that a patient cannot complete is not truly good oncology. Every MDT recommendation should therefore include an ideal option and a practical option.
Standardization is critical. Weekly tumour boards should follow fixed templates: diagnosis, stage, pathology review, molecular profile, comorbidities, intent of treatment, financial considerations and final consensus plan. Documentation must be clear, auditable and communicated to the patient in understandable language. Virtual MDTs can connect district centres in Tamil Nadu with tertiary hospitals through hub-and-spoke cancer networks.
Government systems can strengthen MDTs through common referral pathways, digital records and integration between medical colleges and peripheral centres. Roche can responsibly support training programs, molecular testing access and digital tumour-board infrastructure.
The hallmark of a good MDT is the ability to make different experts work together with humility for one patient sitting quietly at the centre of the room.

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Objective of your solution: (Briefly define the primary outcome of your solution to this challenge):
The primary outcome of this multidisciplinary team (MDT) framework is to improve coordinated, patient-centered oncology care through timely, evidence-based, and consensus-driven treatment decisions. The model aims to reduce delays in diagnosis and treatment, improve treatment accuracy and completion rates, enhance communication among specialties, and ultimately improve survival outcomes, quality of life, and patient satisfaction while optimizing resource utilization in cancer care settings.

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.):

A multidisciplinary team (MDT) is essential for improving the quality and continuity of cancer care. The proposed solution focuses on establishing a structured, patient-centered oncology care model where specialists from different disciplines collaborate to provide evidence-based and coordinated treatment. The MDT should ideally include surgical, medical, and radiation oncologists along with radiologists, pathologists, oncology nurses, palliative care specialists, nutritionists, psychologists, rehabilitation experts, and social workers. Regular interaction among these specialists allows accurate diagnosis, better staging, individualized treatment planning, and comprehensive supportive care.

A standardized workflow is critical for successful MDT functioning. Weekly tumor board meetings should be conducted with predefined case discussions, radiology and pathology review, and documentation of consensus-based treatment plans. Uniform institutional protocols based on established national and international guidelines should be followed while adapting them according to local resource availability.

The proposal emphasizes a patient-centered approach in which treatment decisions consider not only disease biology and stage but also patient preferences, performance status, comorbidities, psychosocial support, affordability, and quality-of-life concerns. Shared decision-making and proper counseling should be integral components of the MDT process.

Digital medical records and streamlined referral systems can improve coordination between departments and reduce delays in diagnosis and treatment initiation. In resource-limited settings, virtual MDTs using telemedicine platforms can help connect smaller centers with tertiary oncology institutions for expert opinions and treatment planning.

Regular audits of treatment outcomes, toxicities, patient satisfaction, and treatment completion rates should be performed to maintain quality standards and identify gaps in care delivery. Continuous training and academic discussions among MDT members can further improve clinical practice.

This model is expected to improve treatment accuracy, reduce fragmentation of care, enhance patient satisfaction, optimize resource utilization, and ultimately improve survival and quality-of-life outcomes in oncology practice.

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Objective of your solution: (Briefly define the primary outcome of your solution to this challenge):
To establish an effective patient-centred MDT approach, where treatment decisions are made collaboratively based on latest evidence, patient preferences, and affordability.

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.):

Solution:

Formation of the Team:

- MDT comprises primarily of medical, surgical and the radiation oncologist, pathologist and the Radiologist and Nurses.
- Supportive staff like physiotherapists, dieticians, speech therapist and palliative care specialist as needed based on a case-by-case basis.
- In our country, opinion of financial counsellors to be considered, to make an informed decision about the Treatment plan based on the affordability/ social schemes.

Workflow preparation:

1. Pre-MDT preparation:

- Compiling adequate history and relevant investigation
- Involving the Referring physician while collecting history, gives much detailed information about the patient. This will build professional trust and future collaborations.
- Relevant case file to be shared with members before scheduled meeting.

2. MDT meeting:

Regular MDT meeting to be conducted under Lead clinician with pre-defined agenda. Cases should be discussed, with contribution from all the members of discipline, and come to a joint conclusion.

3. Post MDT Meeting:

The decision of the MDT to be discussed with the patient attenders for their informed choice. A coordinator has to be assigned to the patient to ensure effective communication and coordination across departments**.**

Logistic challenges and probable solutions in maintaining successful MDT:

- The success of an MDT depends on regular meetings with active participation from all members, rather than merely forming an MDT team.
- Effective MDT functioning requires strong leadership from the chairperson, administrative support, and commitment from all participating departments.
- Digital video conferencing can improve attendance and enable documentation of MDT decisions for future reference and continuity of care.
- Routine cases may be managed by regional MDTs, while complex cases can be escalated through a Tiered Tele-MDT model, where regional teams collaborate with Centres of Excellence using digital platforms. This can reduce unnecessary referrals and decongest apex institutes, especially in hub-and-spoke healthcare systems.
- Periodic audits, treatment outcomes, and follow-up discussions of previously reviewed patients can help improve future clinical decision-making and quality of care.

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Objective of your solution: (Briefly define the primary outcome of your solution to this challenge):
How can India build an accountable virtual MDT system, anchored within the existing NCG pattern with focus on healthcare centers beyond metropolitan cities, ensuring complete and standardized case presentations that will result in efficient and productive panel discussions?

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.):

1. Rotating hub model- Expand the hosts beyond a fixed 2 or 3 centres to a rotating panel of 8 to10 NCG centres per tumour stream (AIIMS institutes, regional cancer centres, government and private oncology teaching institutions), with NCG coordinating the rotation roster.
2. AI-assisted case-completeness checkpoint at entry level for cases- A curated portal with structured templates customised by tumour site, which automatically flags missing data or relevant investigations and prioritises cases by urgency and access- centres without local multidisciplinary capacity and stratifying entrees from high-urgency to elective. This priority ordered entries can be reviewed by dedicated paid staff.

3. A addition of treatment-intent as discussed with the patient and family, their financial reality in specific boxes within the entry portal which will guide decisions and give tiered options by panel. This will also spark quick discussions of drug trial centres, free access, palliative centres and other financial assistance
4. Tiered participation with case-specific invites. Every NCG-registered oncologist receives advance email of upcoming sessions and can respond with a click. Beyond this open access, a structured approach will be needed
Level 1: atleast 100-200 nominated/voluntary oncologists across various tumour streams across all disciplinaries with overlaps permitted, two-year terms with monthly rotation, with formal NCG appointment and protected institutional time.
Level 2: 50-100 subspecialty experts (sarcoma, paediatric, gynaecologists etc) contacted only for relevant cases.
Level 3: Residents and fellows as observer; Cases to be discussed can be given as links in the email for prior reading for interested candidates.
At submission, presenters tick essential specialties like medical, surgical, radiation, pathology, oncoradiology, nuclear medicine, palliative care, psycho-oncology, genetic counselling, and reconstructive surgery; mandatory invites go to corresponding Tier 1 panellists and relevant Tier 2 experts
Some incentives should also be planned such as NCG faculty designation, CME credits, honorarium, authorship on outcomes publications, and weighting in NCG grants for those with active participation
5. Prospective closed-loop audit. To try this model as a pilot project with fewer centres and then scale it if is feasible. A small NCG-ICMR-NCDIR audit unit produces a quarterly report and annual publication of the impact of such VTBs.

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Objective of your solution: (Briefly define the primary outcome of your solution to this challenge):
We have to actively force the focus back onto the actual person sitting in the clinic. This is where a clinical nurse navigator completely changes the dynamic.

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.):
Getting a functional tumor board off the ground is rarely straightforward. You absolutely need a tight core team to make it work. For us in the operating room, having a medical oncologist and a dedicated pathologist right there at the discussion table is what actually drives the treatment plan. And radiation experts must be looped in early. You simply can't rely on isolated opinions if you are trying to align with rigorous NCCN or ESMO frameworks.
We have to actively force the focus back onto the actual person sitting in the clinic. This is where a clinical nurse navigator completely changes the dynamic. They usually know if a patient is realistically fit enough to recover from an aggressive D2 lymphadenectomy. Or if they would prefer prioritizing their basic quality of life over a minimal statistical survival bump. And we really have to frame the entire surgical strategy around what the patient explicitly values.

Without a rock-solid workflow, the meetings just devolve into loud, unstructured debates. You desperately need a rigid blueprint. Cases have to be submitted digitally a couple of days ahead of time. This totally stops the chaotic scramble for imaging scans right as the meeting starts. During the session itself, you just have to stick to a hard timeline. The primary physician pitches the initial protocol for the group to critique. Then the scans and tissue margins get formally reviewed. Finally, that consensus decision absolutely must be logged into the electronic health record instantly. Because if that final ASCO-aligned plan isn't documented before the team scatters, the whole MDT discussion basically went to waste.

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

- To establish an effective multidisciplinary team (MDT) framework that delivers coordinated, evidence-based, and patient-centered cancer care.
- To promote shared decision-making by integrating clinical expertise, patient preferences, quality-of-life considerations, and supportive care needs into treatment planning.
- To develop standardized MDT workflows for case review, documentation, care coordination, and outcome monitoring, ensuring timely and high-quality 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.):

A multidisciplinary team (MDT) is essential in cancer care because it ensures coordinated, comprehensive, and patient-centered treatment. An ideal oncology MDT should include a medical oncologist, surgical oncologist, radiation oncologist, pathologist, radiologist, oncology nurse, dietician/nutritionist, psychologist or counselor, palliative care specialist, pharmacist, and social worker. Each member contributes unique expertise in diagnosis, treatment, supportive care, rehabilitation, and follow-up.

A patient-centered approach is the foundation of a successful MDT. Before discussing treatment, all members should know the patient's disease stage, performance status, comorbidities, financial condition, and personal preferences. Treatment decisions should balance medical benefit, quality of life, and affordability. Patients and family members should be properly informed about available treatment options, expected outcomes, side effects, and costs. Shared decision-making increases trust and improves adherence to treatment. An MDT coordinator or neutral recorder should document all discussions, recommendations, and information explained to the patient for transparency and future reference.

Standardized workflows are important for smooth MDT functioning. Before meetings, all clinical records, imaging, and pathology reports should be collected. During meetings, cases should be presented systematically, followed by radiology and pathology review and discussion of treatment options. Every member should have equal opportunity to express opinions, and disagreements should be handled respectfully and professionally. Final decisions should be evidence-based and clearly documented. After the meeting, the care coordinator should ensure timely appointments, referrals, treatment initiation, and follow-up. Regular audits, feedback, and communication among team members help maintain quality and improve patient outcomes.

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Objective of your solution: (Briefly define the primary outcome of your solution to this challenge):
To establish an effective, patient-centered multidisciplinary team (MDT) model in oncology practice that promotes coordinated decision-making, improves treatment quality, ensures continuity of care, and optimizes clinical outcomes through collaborative expertise.

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.):
A successful oncology MDT should include medical oncologists, surgical oncologists, radiation oncologists, radiologists, pathologists, nuclear medicine specialists, genetic counselors, palliative care specialists, oncology nurses, pharmacists, nutritionists, psychologists, and supportive care professionals. The team composition may be adapted according to cancer type and institutional resources.
A patient-centered approach requires that every treatment decision considers the patient's disease characteristics, personal preferences, quality of life, social circumstances, and treatment goals. Patients and caregivers should receive clear information about available options, expected benefits, risks, and supportive care needs. Shared decision-making should be integrated into routine practice.
Standardized MDT workflows should include scheduled tumor board meetings, predefined referral criteria, complete clinical documentation, radiology and pathology review, and recording of treatment recommendations. Each case should have a clear diagnosis summary, staging information, biomarker profile, treatment options, and follow-up plan. A designated coordinator can ensure communication between specialties and timely implementation of decisions.
Quality improvement can be supported through regular audits, outcome monitoring, adherence to guidelines, patient feedback, and continuous professional education. Digital platforms and electronic medical records can enhance communication and documentation.
An organized MDT framework ensures evidence-based, efficient, and personalized cancer care while reducing delays and improving patient outcomes.