Title:
Standardization of protocol for various cancers in resource-constrained settings

Full Name:
Anand Praveen Kumar A

Name of the Institution:
Stanley Medical College

State:
Tamil Nadu

Objective of your solution: (Briefly define the primary outcome of your solution to this challenge):
1. Standardize Cancer Treatment Protocols
2. Enhance Healthcare Capacity
3. Increase Access to Cancer Care
4. Promote Research and Innovation
5. Improve Patient Outcomes

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.):

Steps and Considerations for Standardizing Protocols

1. Needs Assessment: Evaluate the current cancer treatment landscape, identifying gaps, challenges, and available resources.
2. Multidisciplinary Team Formation: Assemble a team of local healthcare professionals, including oncologists, surgeons, radiologists, and pathologists.
3. Collaboration with National and International Organizations: Partner with organizations like the World Health Organization (WHO), International Agency for Research on Cancer (IARC), and national cancer societies to access guidelines, expertise, and resources.
4. Adaptation of Existing Guidelines: Adapt international guidelines (e.g., NCCN, ESMO) to suit local resources, infrastructure, and patient populations.
5. Development of Context-Specific Guidelines: Create new guidelines addressing unique challenges and needs in resource-constrained settings.
6. Training and Capacity Building: Provide healthcare professionals with training and education on standardized protocols and new technologies.
7. Monitoring and Evaluation: Establish a system to track outcomes, identify challenges, and refine protocols as needed.
8. Patient Engagement and Education: Educate patients about standardized treatment protocols, benefits, and potential side effects.

Alliances with National and International Cancer Organizations

1. World Health Organization (WHO): Collaborate on guideline development, training, and capacity building.
2. International Agency for Research on Cancer (IARC): Access expertise, resources, and research findings.
3. National Cancer Institute (NCI): Partner on research, training, and guideline development.
4. American Society of Clinical Oncology (ASCO): Collaborate on guideline development, education, and training.
5. European Society for Medical Oncology (ESMO): Partner on guideline development, education, and training.
6. National Cancer Grid (NCG): Partner on protocols, Virtual tumor board

Solutions to Encourage and Support Research

1. Public-Private Partnerships: Foster collaborations between governments, industry, and academia to support research and innovation.
2. Grants and Funding: Establish dedicated funding mechanisms for research on cost-effective and innovative cancer treatments.
3. Research Networks: Create networks of researchers, clinicians, and scientists to facilitate collaboration and knowledge sharing.
4. Open-Access Publishing: Promote open-access publishing to disseminate research findings widely and accelerate progress.
5. Capacity Building and Training: Provide training and education for researchers, clinicians, and scientists to enhance their skills and expertise.
By following these steps, forming strategic alliances, and supporting research, it is possible to standardize cancer treatment protocols in resource-constrained settings, ultimately improving patient outcomes and saving lives.

Full Name:
Akila B

Name of the Institution:
Tirunelveli Medical College

State:
Tamil Nadu

Objective of your solution: (Briefly define the primary outcome of your solution to this challenge):
HIKE UP PICKUP, SAFE CURE, ALLEVIATE ANXIETY
1. Ensuring efficient utilization of limited resources paving way for maximal salvage of QALYs
2. Ensuring safe health care delivery and promotion of health care seeking behavior among the masses.

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.):
Organizing awareness programs and catchy slogans to raise health care attendance, enabling higher early-stage pickup rates
Stepwise diagnostic and therapeutic planning for each cancer management and stratification as essential, optimal and optional
Cost effective diagnostic strategies:
Considering the utilization of IHC in place of NGS or GEP
Considering the available CT imaging instead of PET CT
Supporting clinical trials on low dose strategies and trials on shorter therapy duration and trials on drug repurposing
Provision of resource stratified guidelines - essential, optimal and optional and delivery of appropriate therapy
Triaging of patients based on curability of the disease, patient specific factors - age, comorbidities, PS, ability to tolerate therapy and the estimated QALYs saved
Triage categories: Terminally ill, under surveillance and under active treatment
Terminally ill - to get hospice based care Under surveillance - telemedicine and periodic follow up from local health care provider Active cancer care - CURATIVE vs PALLIATIVE Curative - to get more focus and attention of both health care providers and resources to strictly ensure optimal dose intensity, needed supportive care for safe delivery of oncologic treatments Palliative - to get more tolerable therapy with less need for supportive care such as G-CSF
Organizations to work with National cancer grid NCRP under ICMR NPCDCS under NHM National institute for cancer prevention and research

International collaboration for cancer classification and research WHO International Atomic Energy agency
Cooperation of NGOs for implementation

Solutions for cost effective research

1. Promoting drug/technique/instrument repurposing studies
2. Financial Support for low dose studies
3. Easing EC approval for such studies under the grounds of something is better
4. Grants and technical support for students to participate in innovation
5. Abbreviated duration of usage of expensive medicine to be explored

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Full Name:
Beulah Elizabeth Koshy

Name of the Institution:
Kidwai Memorial Institute of Oncology, Bengaluru

State:
Karnataka

Objective of your solution: (Briefly define the primary outcome of your solution to this challenge):
After a comprehensive evaluation of the current healthcare system, treatment guidelines can be customized, workforce capacity, diagnostic and treatment accessibility enhanced, partnerships and collaborations forged; to standardize protocols for various cancers in resource-limited settings.
After a comprehensive evaluation of the current healthcare system, treatment guidelines can be customized, workforce capacity, diagnostic and treatment accessibility enhanced, partnerships and collaborations forged; to standardize protocols for various cancers in resource-limited 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.):

Assessing the Healthcare Landscape

A comprehensive evaluation of the current healthcare system should be put forth:

1. Cancer Prevalence: Identify the most common cancers based on epidemiological data
2. Infrastructure and Workforce: Assess the availability of oncologists, diagnostic tools, radiotherapy centers, and supportive care services
3. Recognizing Resource Constraints: Map out financial limitations, medication shortages, and gaps in workforce training

Customizing Treatment Guidelines

1. Prioritizing and customizing the interventions that provide the best outcomes with the available resources and existing limitations.
2. Essential medications and equipment should be listed out and followed. For example, usage of the WHO's Model List of Essential Medicines for Cancer as a reference.

Enhancing the Workforce Capacity

1. Make use of the general practitioners and nurses by training them to provide basic oncology care
2. Regular training sessions to update healthcare providers on the current and best practices.
3. Collaboration between primary health care providers, specialists and palliative care professionals

Strengthening Diagnostic and Treatment Accessibility

1. Increase the availability of pathological services, imaging and biomarkers testing.
2. Accomplish a tiered healthcare system with well-defined patient referral pathways.
3. Use of telemedicine for remote consultations, medical training, and expert second opinions.

Affordable and Sustainable Medication Supply

1. Discussing and working with pharmaceutical companies to secure lower prices for chemotherapy and supportive drugs.
2. Supporting and manufacturing essential medicines to improve accessibility.
3. Preventing shortage of medications by improving the procurement and distribution systems

Strong partnerships and collaborations with National and International organizations are necessary for the development and adaptation of standardized cancer treatment standards. Working together with local NGOs, medical societies, cancer centers, and government health agencies at the national level guarantees that procedures meet local needs and are in line with the healthcare system as it already exists. International collaborations with agencies such as WHO, IARC, UICC, and ASCO offer access to vital resources, worldwide expertise, and research assistance. Prominent cancer institutes, academic institutions, and funding organizations make contributions by providing financial support, training, and research funding. Together, these collaborative efforts create useful, research-based recommendations that enhance cancer treatment in environments with limited resources. More funding from governments, international health organizations, and the corporate sector is needed to support research for novel and reasonably priced cancer treatments in areas with low resources.
1. Promotion of biosimilars, generic medications, and inexpensive diagnostic equipment.
2. Clinical trials focused on reasonably priced treatments by collaboration between academic institutions, research centers, and pharmaceutical firms.
3. Long-term growth is ensured by improving infrastructure and training programs to increase local research capacity.
4. Encouraging open-access data sharing and obtaining funds from institutions like Global Fund and WHO

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Full Name:
Ananya Ghosh

Name of the Institution:
Narayana Superspeciality Hospital

State:
West Bengal

Objective of your solution: (Briefly define the primary outcome of your solution to this challenge):
Establishing standardized protocols for cancer treatment requires the classification of resources, consideration of context, involvement of stakeholders, training, and ongoing monitoring. Partnerships

with both national and international organizations, multidisciplinary teams, and coalitions are crucial. To encourage cost-effective research, strategies such as funding models, collaborative studies, cost-effectiveness assessments, and the integration of technology should be implemented. Collaborations between academic institutions, pharmaceutical firms, and healthcare providers can promote transparency and ease the adoption of new practices. Additionally, employing Markov models along with telemedicine and AI-driven diagnostics can reduce expenses and improve accessibility.

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.):

Steps and Considerations for Standardizing Protocols:

1. Resource Stratification: Create guidelines that reflect the level of available resources, divided into basic, core, enhanced, and maximal categories.
2. Contextualization: Modify existing guidelines to fit local circumstances, taking into account infrastructure, workforce, and financial limitations.
3. Stakeholder Engagement: Involve healthcare providers, patients, policymakers, and other relevant parties to ensure transparency and facilitate adoption.
4. Training and Education: Offer training for healthcare professionals to effectively implement the protocols.
5. Monitoring and Evaluation: Set up systems to track outcomes and adjust protocols based on feedback.

Necessary Collaborations:

National Cancer Organizations: Work with groups like the National Comprehensive Cancer Network (NCCN) to access evidence-based guidelines.

1. International Organizations: Collaborate with entities such as the American Society of Clinical Oncology (ASCO) for resource-stratified guidelines.
2. Medical Professionals and Experts: Create multidisciplinary panels that include oncologists, researchers, and patient advocates.
3. Coalitions: Partner with organizations like the Cancer Support Community to address psychosocial and systemic issues.

Strategies to Promote Cost-Effective Research:

1. Funding Models: Push for increased funding from government and non-profit sources to support innovative research initiatives.
2. Collaborative Research: Encourage partnerships among academic institutions, pharmaceutical companies, and healthcare providers.
3. Cost-Effectiveness Analysis: Utilize tools like Markov models to assess the economic feasibility of treatments.
4. Technology Integration: Invest in telemedicine and AI-based diagnostics to lower costs and enhance accessibility.

Full Name:
Kartik Gajanan Asutkar

Name of the Institution:
Kidwai Memorial Institute of Oncology, Bengaluru

State:
Karnataka

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

1. Improving clinical outcomes by aligning evidence-based practice with locally available diagnostics, therapeutics and workforce capacities.

2. High burden cancers in the community (cervical, breast, lymphoma) treatment to be safe, effective and culturally acceptable
3. Partnership with national and international organizations, use of technology, telemedicine
4. Cost effective innovation by fostering research for affordable therapies, drugs and delivery models (training nurses, mobile clinics).

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. Steps and Considerations for Standardizing Protocols

- Situational Analysis: Assessing infrastructure, workforce, and diagnostic capabilities. Prioritize high-burden, treatable cancers (e.g., cervical, breast, lymphoma).
- Adapt Guidelines to Local Context: Simplify international guidelines (e.g. NCCN). Focus on clinical staging and symptom-based algorithms.
- Task-Shifting and Training: Train nurses and community health workers to administer chemotherapy or palliative care. Telemedicine.
- Strengthen Supply Chains: Ensure reliable access to essential medications (e.g., generics, opioids).
- Monitor and Iterate: Track treatment outcomes and toxicity. Revise protocols based on real-world data and emerging evidence.
- Address Equity: Use mobile clinics. Subsidize costs for vulnerable groups.

2. Alliances Needed with Organizations and Experts

- International Organizations: WHO: For evidence-based guidelines. Global Oncology or ASCO, ESMO: For protocol adaptation tools. NGOs: For implementation support and advocacy.
- National Partnerships: Ministries of Health: Align protocols with national cancer control plans. Academic Institutions: For training and research capacity.
- Industry and Advocacy Groups: Pharmaceutical Companies: Negotiate bulk pricing for generics. Patient Advocacy Groups: To address stigma and improve adherence (e.g. Breast Cancer Awareness NGOs).

3. Solutions to Encourage Cost-Effective Research >To drive innovation in low-resource settings:
1. Public-Private Partnerships (PPPs): - Fund trials for affordable therapies.
2. Adaptive Trial Designs: - Use pragmatic trials that integrate real-world constraints.
3. Open-Access Platforms: - Share data on treatment outcomes. -Use AI to analyze low-cost diagnostics (e.g., AI-powered pathology tools).
4. Local Research Capacity Building: - Train researchers in LMICs via partnerships (e.g., NIH's Fogarty Program).
5. Incentivize Innovation: -Prizes for low-cost devices (e.g., portable cryotherapy for cervical cancer). -Regulatory harmonization to fast-track approval of generics and biosimilars.
6.Leverage Existing Programs: -Integrate cancer research into HIV/TB platforms

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Full Name:
Sai Kiran

Name of the Institution:
JIPMER, Puducherry

State:
Tamil Nadu

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

Primary outcome will be to ensure consistency, increase to access to all strata of population, proper implementation at all the health care centers, training of all healthcare workers involved, ensuring treatment completion and adherence, to design feasible protocol, and providing standardized 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.):
To create simplified, evidence-based protocols using generic drugs, training of health care workers to apply and stick to the protocol, include local drug, staff and infrastructure to design protocols, optimized procurement of drugs to prevent stockouts, reducing stigma around the treatment protocol and to engage communities with awareness for seeking treatment, auditing with stakeholders for better implementation.

Full Name:
Soumya BM

Name of the Institution:
Manipal hospital Bengaluru

State:
Karnataka

Objective of your solution: (Briefly define the primary outcome of your solution to this challenge):
The aim of this solution is standard cancer care to every patient regardless of his financial status and place of his residence. Nowadays lot of advances are happening in cancer care. Everyday there is a new drug, new intervention and new algorithm formed. But people in tier 2 cities and remote areas don't get the standard of care due to poor healthcare distribution in India. This solution aims to provide uniform cancer care to every cancer patient.

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.):
Steps and Considerations for Standardizing Protocols in Resource-Constrained Settings
1. To first find out the need and current available resources. Assess the cancer incidence, prevalence, type of cancer and identify target population. Make a note of all available resources, existing healthcare facilities and access to medications.
2. To look for the availability of proper supportive care and multidisciplinary team for building up good cancer care.
3. To summarize the standard treatment protocols as per the existing guidelines like NCCN, ESMO and DCGI. The standard treatment protocols for cancer care are easily accessible to health care workers through online platforms. But the challenge is to deliver these treatments to the public staying in resource-constrained setting.
4. If a patient from resource constraint setting doesn't get the standard treatment due to cost or non-availability of medicine or devices is a kind of gross negligence from healthcare system. It's important to promote doctors and all health care workers to work in at least tier 2 cities with good pay. And make availability of drugs, proper tissue diagnosis, radiation oncology equipment, OT, etc in the hospital.
5. Implementation Framework To make easy transportation of patients, tissue blocks, radionucleotide dye etc to make it unified setup.
6. Monitoring, Evaluation, and Quality Assurance To regularly audit the treatment provided and maintain the standard of care.

7. In India, public is aware of health concerns like heart attack or stroke but not about cancer. Proper awareness among patients and doctors of other branches to understand the cancer treatment for early diagnosis and proper referrals. Alliances Needed to Develop or Adapt Standardized Guidelines
A. National Stakeholders Ministries of Health: Policy endorsement, funding, and regulation. National Cancer Control Programs (NCCP): Integration into national health strategies. Academic and Research Institutions: Protocol development and evaluation. Medical and Nursing Councils: Endorsement of training and certification standards.
B. International Organizations World Health Organization (WHO): Technical guidance, toolkits, and Essential Medicines List. International Atomic Energy Agency (IAEA): Support for radiotherapy infrastructure and training. Union for International Cancer Control (UICC): Knowledge sharing and advocacy support. International Agency for Research on Cancer (IARC): Epidemiological data and research collaboration. NCCN, ASCO, ESMO: Access to evidence-based guidelines adaptable to local needs.
C. Professional Societies and NGOs National oncology societies: Standard setting and peer networks. NGOs and philanthropic groups: Funding, logistics, and advocacy support (e.g., PATH, Clinton Health Access Initiative).
D. Private Sector and Pharma Partnerships for affordable medications and technologies through access programs or tiered pricing. Solutions to Encourage and Support Cost-Effective and Innovative Research
A. Local and Regional Research Grants: Establish small-scale funding opportunities for local researchers to explore context-specific interventions.
B. Public-Private Partnerships Collaborate with biotech firms and universities to pilot low-cost diagnostics, drugs, and treatment devices.
C. Academic Twinning and Mentorship Programs Pair institutions in resource-constrained settings with those in high-income countries for joint research initiatives.
D. Simplified Clinical Trial Regulations Streamline ethics approval and regulatory processes to enable local participation in global clinical trials.
E. Data Collection and Registries Develop centralized, anonymized databases to support research on cancer trends, treatment outcomes, and cost-effectiveness.
F. Innovation Hubs Set up innovation centers within cancer hospitals or universities to test new models of care delivery (e.g., tele-oncology, task shifting, mobile diagnostics).
G. Publication and Dissemination Support- Support local researchers in publishing findings and sharing innovations in regional and global forums.

Full Name:
Prabhu Pandian

Name of the Institution:
Madurai Medical College

State:
Tamil Nadu

Objective of your solution: (Briefly define the primary outcome of your solution to this challenge):
Improved cancer survival and quality of life in resource-constrained 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.):
Standardizing cancer care protocols in resource-limited settings demands a strategic, multi-pronged approach. This necessitates a phased implementation guided by robust evidence and pragmatic considerations.

Phase 1: Contextualized Assessment and Prioritization: A comprehensive needs assessment is paramount, identifying prevalent cancers, resource availability (human capital, infrastructure, and funding), and existing treatment practices. This assessment should leverage epidemiological data, healthcare facility audits, and qualitative insights from clinicians and patients. Prioritization should focus on cancers with the highest burden and those most amenable to cost-effective interventions within existing constraints.
Phase 2: Adaptive Guideline Development: Existing global guidelines (e.g., WHO, NCCN) serve as foundational documents but require careful adaptation. This involves simplifying complex regimens, ensuring feasibility given resource limitations, and prioritizing evidence-based interventions demonstrably effective even with restricted resources. This phase critically involves a multidisciplinary team of oncologists, pathologists, radiologists, nurses, and public health specialists.
Phase 3: Comprehensive Capacity Building: Training and continuing professional development are essential. This requires tailored educational programs, mentorship, and ongoing support for healthcare professionals. Focus should be placed on practical skills, troubleshooting common challenges inherent to resource-constrained environments, and fostering adherence to standardized protocols.
Phase 4: Rigorous Quality Assurance and Monitoring: Implementation requires robust quality assurance mechanisms. This entails establishing standardized data collection protocols, implementing effective monitoring systems, and leveraging data analytics to identify areas for improvement and inform iterative adjustments to protocols.
Phase 5: Sustainable Implementation and Scaling: Sustainability necessitates secure funding streams, reliable supply chains for essential medications and equipment, and integration into national health policies. This requires engagement with government agencies, international organizations (e.g., WHO, Global Fund), and philanthropic organizations. Strategic Alliances: Success hinges on forging strong partnerships with:
* National Cancer Control Programs: Essential for policy integration, resource allocation, and national-level surveillance.
* International Cancer Organizations: Leveraging global expertise in guideline adaptation and best practices for resource-limited settings.
* Key Stakeholders: This includes pharmaceutical companies (for affordable medication access), medical technology providers (for adaptable technologies), and patient advocacy groups (for patient-centered protocols).
* Research Institutions: Collaboration is vital to support research focused on cost-effective and innovative treatment solutions tailored to low-resource contexts. Strategies for Cost-Effective Innovation:
* Targeted Research Funding: Prioritizing research grants focusing specifically on cost-effective cancer interventions for resource-limited settings.
* Public-Private Partnerships: Leveraging the combined strengths of governments, academic institutions, and private sector organizations to accelerate research and development.
* Open Science and Data Sharing: Facilitating the open dissemination of research findings and data to accelerate innovation and prevent duplication of effort.
* Incentivizing Affordable Technology Development: Creating mechanisms (e.g., grants, tax incentives) to encourage the development and deployment of technologies suitable for low-resource environments. This structured approach, emphasizing collaboration, adaptation, and rigorous evaluation, is crucial for effectively standardizing cancer care and enhancing outcomes in resource-limited settings.

Full Name:
Vishwanath M

Name of the Institution:
Madras Medical College

State:
Tamil Nadu

Objective of your solution: (Briefly define the primary outcome of your solution to this challenge):
Primary Objective: To design, pilot, and validate a resource-tiered, community-informed cancer treatment framework that optimizes outcomes without overburdening the system. Secondary Objectives: To build a decentralized ecosystem of oncology micro-hubs using local personnel. To integrate indigenous cost-effective innovations (e.g., plant-based nutraceuticals, frugal diagnostics). To influence policy by offering evidence from grassroots implementation.

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.):
In places where chemotherapy is a distant word and radiotherapy is three bus rides away; we don't need imported solutions—we need invented ones. Our approach begins by flipping the question: "What can we do with what we have?" Not as a compromise, but as a design challenge. We propose a three-tiered cancer care model, not based on ideal resources, but on real ones. For a primary health center with no oncologist? A "minimum viable protocol" using oral drugs, symptom relief, and strong referral links. For district hospitals? Protocols tailored to their diagnostic and staffing capacity. For apex centers? More advanced care but rooted in the same continuum. But protocols alone don't save lives—people do. So, we train who we have: nurses, MBBS doctors, ASHAs. Give them bite-sized, role-specific training, backed by mobile apps that whisper guidance in their palm. We turn phones into mentors. We build unlikely alliances: rural doctors with global oncologists, herbal medicine researchers with pharmacologists, village patients with national policymakers. Together, they co-create—not copy—the protocols that fit. To fuel the future, we launch a Frugal Cancer Innovation Lab, where ideas like turmeric-based wound dressings or solar-powered biopsy transport boxes aren't laughed out of the room—they're tested. And we keep our ears to the ground. Every protocol, every tool, every innovation is field-tested not in labs, but in living labs—where feedback comes not as statistics, but as stories. This isn't cancer care stripped down—its cancer care reimagined. Practical, powerful, and proudly local. Because in the world's forgotten corners, hope doesn't wait for perfect, it grows from what we dare to build, together.

Full Name:
Vishwanath M

Name of the Institution:
Madras Medical College

State:
Tamil Nadu

Objective of your solution: (Briefly define the primary outcome of your solution to this challenge):
Primary Objective: To architect a layered, human-centered cancer care blueprint—one that listens to the rhythm of each community, bends with the weight of resource limitations, yet stands tall in delivering dignity and healing. We aim to pilot and perfect a resource-tiered framework that doesn't chase perfection, but crafts it from what's already in our hands.
Secondary Objectives: To plant the seeds of an oncology ecosystem, not in ivory towers, but in the hearts of rural clinics and community halls—where trained local heroes (nurses, MBBS doctors, health workers) become the first line of hope. To braid ancient wisdom with modern medicine—by tapping into indigenous, affordable solutions, from turmeric-based nutraceuticals to solar-powered diagnostic kits—rooted in our soil, validated by science. To turn stories from the margins into policy gold—gathering real-world evidence from dusty lanes and crowded clinics and walking it straight into health

ministries and legislative tables. In short, our objective is to build a cancer care revolution that doesn't wait for better days—but makes them, here and now.

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.):
In resource-constrained settings, cancer care doesn't need to mimic the ivory towers of the West—it needs to speak the local language of possibility. Our vision begins by treating limitations as a blueprint, not a barrier. We propose a tiered, context-sensitive protocol framework built on three pillars: pragmatism, decentralization, and collaboration. First, we design modular protocols—not diluted versions of global guidelines, but reimagined blueprints rooted in what's available and what works. At the Essential level, PHCs focus on symptom relief, VIA/VILI screening, and oral palliative therapies. Optimal protocols suit district hospitals, while Aspirational tiers at tertiary centers allow for advanced care. Each level offers dignity, not dependency. Second, we invest in task-sharing and micro-training. Imagine nurses, primary doctors, and even community health workers wielding smart tools and short modules—not to replace oncologists, but to multiply their reach. With decision-support in their palms, cancer care begins at the doorstep, not the capital. Third, we weave alliances that matter. Partnering with WHO, IARC, ESMO, and local medical colleges, we'll form an "Oncology Without Borders" coalition—adapting and evolving guidelines through real-world audits and grassroots feedback. To spark change, we launch a Frugal Oncology Challenge—a stage for barefoot innovations: clay-based cold storage, turmeric gels, solar biopsy boxes. These aren't stopgaps—they're sustainable genius born of necessity. We ground this model in a "living lab" approach—field-tested, story-driven, and constantly refined. Because here, excellence isn't imported, it's grown from grit and community wisdom. This isn't a second-hand model of care. It's our own crafted with courage, care, and confidence that even with less, we can do more.

Full Name:
Joseph Joy

Name of the Institution:
CMC, Vellore

State:
Tamil Nadu

Objective of your solution: (Briefly define the primary outcome of your solution to this challenge):
1. Improved Patient Outcomes:
Enhanced survival, earlier diagnosis, and better quality of life through standardized and risk-adapted treatment protocols.
2. Cost-Effective Care Delivery:
Reduced treatment costs and healthcare burden via optimized use of resources, generic drugs, and simplified regimens.
3. Equitable Access:
Broader and more consistent access to evidence-based cancer care across regions, including rural and underserved populations.
4. System Efficiency:
Strengthened cancer care infrastructure through integrated referral systems and multidisciplinary coordination.
5. Policy Engagement:
Increased policy support and resource allocation driven by real-world evidence, economic justification, and alignment with health priorities.
6. Innovation and Research Growth:

Stimulated local research and adoption of context-relevant innovations, contributing to sustainable improvements 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.):

Optimizing cancer care in low-resource settings demands a balance between evidence-based practice and practical implementation. Standardization is key to improving outcomes, reducing disparities, and ensuring quality care.

Key Steps & Considerations:

- Prioritize high-incidence cancers and interventions with proven cost-effectiveness.
- Localize global guidelines (NCCN, ESMO) into feasible, resource-adapted protocols.
- Develop risk-stratified pathways for curative vs. palliative management.
- Integrate services across primary, secondary, and tertiary levels.

Alliances & Collaborations:

- Engage national cancer programs, oncology societies, and public health agencies.
- Partner with WHO, UICC, IAEA, and regional cancer institutes.
- Involve local oncologists, palliative care teams, and pharmacoeconomists.
- Promote capacity-building via twinning programs and virtual mentorship.

Cost-Effective, Innovative Solutions:

- Encourage real-world data collection and low-cost clinical trials.
- Invest in pooled procurement of generics and biosimilars.
- Utilize digital health platforms for decision support and remote monitoring.
- Explore short-course, low-dose, and oral regimens where effective.

Convincing Policy Makers:

- Present economic models showing reduced long-term healthcare costs via early diagnosis and standardized treatment.
- Demonstrate improved survival and quality of life metrics from pilot projects.
- Highlight alignment with national health priorities and global commitments (e.g., SDG 3).
- Showcase success stories from similar settings to build confidence.
- Advocate for inclusion of essential cancer care in universal health coverage (UHC) plans.
- A clear policy vision, supported by clinical and economic evidence, can drive impactful cancer control strategies even in constrained settings.

Full Name:
Baghath Singh. L A

Name of the Institution:
Madras Medical College

State:
Tamil Nadu

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

To make standardized protocols, customized for resource-poor settings including cost-effective alternative drugs or compounds when a particular high-cost drug is not available. Along with details about capping high-end drugs without much loss of potency.

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 protocols should add alternative drugs in each regimen and also the quantity at which scarcely available drugs can be capped. For example, in Hodgkins, if a cycle of ABVD is not available, CHOP has tried to be an alternative it is in NCCN. Also, vinblastine can be capped at 10 mg, but these are not mentioned in protocols, which is of utmost importance especially in low-resource settings. Most oncologists skip a regimen, the best to treat, if a single drug is not available in the regimen. If an alternative generic drug if feasible is mentioned in protocols, it would be of great help to treating physician and patients. For example, in Hodgkins, Adriamycin has found to be as effective in place of dacarbazine, if it is not available. I would like the protocols to have details regarding survival advantages. For each stage, the trial based on which it was approved along with information whether that included the population in which the drug is to be used. For our context the Indian patients. And if they were included what was the results in them. The protocols should be stratified according to income settings and cost-benefit analysis. Readily available dose modification depending on performance status and toxicity grade should be included with each protocols.

Full Name:
Pankaj Deep Rana

Name of the Institution:
Metro Hospital and Cancer Institute

State:
Uttar Pradesh

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

Innovation in resource-limited settings thrives when local researchers, global funders, tech innovators, and policymakers collaborate. By combining frugal science, adaptive trials, and South-South partnerships, we can accelerate affordable, life-saving cancer solutions.

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.):

General Principles for Protocol Standardization:

1. Prioritize high-burden cancers with proven cost-effective interventions.
2. Use evidence-based, simplified regimens (e.g., hypofractionated radiotherapy, fewer chemotherapy cycles).
3. Leverage WHO Essential Medicines List (EML) and National Cancer Grid (NCG) guidelines where applicable.
4. Task-shifting: Train mid-level providers (nurses, clinical officers) for follow-ups and basic care.
5. Palliative care integration for advanced cancers (e.g., morphine for pain relief).
6. Resource Optimization Strategies: Chemotherapy—use generic drugs, fewer cycles.
7. Radiotherapy: Hypofractionation.
8. Surgery: Focus on essential procedures (e.g., mastectomy over breast-conserving surgery if RT unavailable).
9. Diagnostics: Use clinical staging where imaging (CT/MRI) is unavailable.

International Organizations & Partnerships:

1. World Health Organization (WHO)
2. International Agency for Research on Cancer (IARC)
3. Union for International Cancer Control (UICC)

4. European Society for Medical Oncology (ESMO) Global Oncology
5. National Cancer Grid (NCG) – India
6. African Organisation for Research and Training in Cancer (AORTIC)
7. Ministries of Health (MoH) & National Cancer Institutes
8. International Pediatric Oncology Society (SIOP)

Solutions:

1. Strengthen Local Research Capacity - Establish Regional Research Hubs: Example – Uganda Cancer Institute (UCI) & Fred Hutch Collaboration.
2. Improve Pathology & Data Infrastructure: Low-cost digital pathology (e.g., AI-assisted mobile microscopy).
3. Pragmatic Trials in Real-World Settings: Focus on simplified, low-cost regimens.
4. Leverage South-South Collaboration: LMIC-led trials (e.g., Brazil's Barretos Cancer Center testing HPV self-sampling).
5. Public-Private Partnerships (PPPs): - Drug Access Programs (Gavi/UNITAID → Fund HPV vaccine rollout).
6. Leverage Technology & Frugal Innovation: - AI & Mobile Health (mHealth): AI for triage (e.g., AI-assisted cytology for cervical cancer screening). - Low-Cost Diagnostics: Portable ultrasound for tumor staging (e.g., Butterfly iQ).
7. Local Manufacturing & Regulatory Streamlining with compulsory licensing for critical drugs.

Full Name:
Dr Vyshakh T

Name of the Institution:
Regional Cancer Centre Trivandrum

State:
Kerala

Objective of your solution: (Briefly define the primary outcome of your solution to this challenge):
Standardization of protocols in resource-limited setting using individualized guideline development committee setup and customized multidisciplinary tumor board establishment

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 burden of cancer is skyrocketing in low- and middle-income countries and hence the need of a customized guideline bundle in each cancer management unique situation is the need of the hour in tacking this particular challenge. This can be done by

1. Establishing an individualized region wise guideline development committee comprising of members particularly from major institutions of these countries
2. Conducting global multi-disciplinary tumor boards addressing the problems unique to these regions, bearing in mind the resource and economic constraints faced by these countries

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Full Name:
Nandhakumar

Name of the Institution:
Meenakshi mission hospital, Madurai

State:

Tamil Nadu

Objective of your solution: (Briefly define the primary outcome of your solution to this challenge):
Identify what alliances with national and international cancer organizations, medical professionals, and experts are needed to develop or adapt standardized cancer treatment guidelines.

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.):
There is a gross difference in the patient profile, clinical profile, and financial status of the patient between various countries and continents. It is always better to derive a protocol with national and international collaboration, so that cancer treatment all over the world will become same and affordable for a particular disease.

Full Name:
Prabu Prasanna N

Name of the Institution:
Govt. Kilpauk medical college, Chennai

State:
Tamil Nadu

Objective of your solution: (Briefly define the primary outcome of your solution to this challenge):
To deliver accessible, effective, and sustainable cancer care that improves survival rates and quality of life for patients. By prioritizing common cancers, simplifying diagnostics, and adapting treatments to limited resources, the approach ensures feasibility. Through tiered protocols, prevention, and early detection, it maximizes impact. Collaborations with international organizations, national health bodies, and experts ensure evidence-based, locally relevant guidelines. Research is encouraged through networks, funding, and technology to develop cost-effective, innovative solutions, ultimately making cancer care equitable and impactful in low-resource environments.

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.):
To standardize cancer treatment protocols in resource-constrained settings, a comprehensive, collaborative, and adaptive approach is essential. The solution begins by prioritizing high-burden cancers like cervical or breast cancer, where early intervention yields significant outcomes. Simplified diagnostics, using affordable tools like clinical exams and ultrasound, ensure feasibility without advanced technology. Treatment protocols are tailored to local resources, emphasizing generic drugs, basic surgery, and palliative care, with referral pathways for radiotherapy where available. Prevention and early detection are integrated through community education and cost-effective screening, such as HPV vaccination, reducing the need for complex treatments. Tiered protocols align with varying healthcare levels, offering flexibility to adapt to local constraints. Palliative care training for community health workers addresses symptom management and improving quality of life when curative options are limited. Local stakeholder engagement ensures protocols are culturally sensitive and practical, incorporating feedback from healthcare providers and community leaders. Align with National Health Ministries and local oncology societies, rotary and lions clubs, local, regional, national press, influential youtubers, establish protocols with regional needs. Training local researchers builds sustainable capacity.