Title:
How can we bridge the gap between Innovation and Access in cancer treatment?

Full Name:
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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):
To guarantee that every patient benefits from developments in medical technology and medicines, it is crucial to close the gap between innovation and access in cancer therapy. This problem is especially noticeable in low- and middle-income nations, where differences in healthcare resources and infrastructure might make it more difficult to get cutting-edge medicines in a timely manner.

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.):
Implementing Evidence-Based Screening

Existing Gaps in Access to Cancer Innovations

1. Economic Barriers High Cost of Treatment:

Many more advanced therapies which promise to lengthen a life or even cure deadly illnesses become a luxury as they come with enormous prices which some patients might never be able to afford, especially with the uninsured or underinsured persons, such an explanation can be based on the outcomes of an epidemiological study.

Limited Insurance Coverage: Healthcare systems exclude novel treatments from the list of things that deserve full coverage, thus patients having no opportunity are the main outcome of the omission.

Pricing and Patent Restrictions: The soaring drug development costs and monopolies from patents are two of the main factors that hinder the production of generic alternatives.

2. Geographical Disparities Urban-Rural Divide:

The system of the healthcare industry is ineffective and is breaking down with time as only spots like cities have technological advancements which get non-including sections like remote areas disadvantaged.

Lack of Healthcare Infrastructure: The reception of highly patented medicines and inoculation is carried out by advanced societies wherein developing and low-income countries cannot afford to gather sufficient evidence to approve new drug development.

Limited Availability of Clinical Trials: Strengthening the activity of trial finding teams in high income countries and at the same time deporting them to third world countries greatly limits patients' opportunities for research.

3. Regulatory and Policy Challenges Lengthy Approval Processes:

Having different databases which are not synchronized is the main reason why it takes too long to approve drugs as there are many steps that each drug must pass to finally be authorized by the FDA.

Lack of Harmonized Policies: The availability of medications in different regions is different and the policy makers and senior staffs are highly curious how to make the transition of drugs more possible.

Bureaucratic Hurdles: Some patients are in hassle because many time-consuming administrative procedures sometimes prohibit them from gaining financial aid and access to treatment programs.

4. Awareness and Education Gaps Lack of Patient Awareness:

The absence of information about the latest and most effective cancer treatments is a common problem that is faced by patients, as well as the specialists themselves.

Limited Medical Training: It is likely that health workers not only in low-income countries but also in the advanced would have a shortcoming in skill level at the beginning since they used to mess up very often in the past.
Misinformation and Stigma: Mixed views and some information that is not factual along with society's misunderstanding and prejudices are the barriers that stop a significant number of people from trying the cutting-edge treatments.

Novel Ways to Bridge the Gaps

1. Financial Innovations and Policy Reforms Expanding Insurance Coverage:
Government and private health insurers should provide state subsidies to low or non-profit insurance companies for them to more effectively integrate treatments for cancer into the policies.
Public-Private Partnerships: Establishing collaborations between governments, pharmaceutical companies, and charitable organizations can be of great benefit in making treatment more affordable and also more accessible for everyone.
Tiered Pricing Strategies: The system can be cut into cheaper prices according to selected socio-economic group at first, and then it can be open to all people once a successful uptake of these therapies has occurred.
2. Decentralization of Cancer Care Telemedicine and Digital Health Solutions:
The difficulties faced by citizens living in rural areas to consult with medical experts in medical centers are nowadays shrinking thanks to the introduction of mobile health systems through which they can receive a proper diagnosis and treatment plan.
Mobile Cancer Clinics: Enriching primary care by adding mobile clinics to the existing structure will make the health system a more trusted and effective one, as the equipped doctors can visit remote areas and provide quality services to the locals there.
Expanding Regional Cancer Centers: The incentive to set up regional facilities will be made known by a group of investors willing to see less migration of cancer patients to main cities and so less demand for public health facilities will be needed.
3. Accelerated Drug Approvals and Regulatory Harmonization Fast-Track Approvals:
Regulators could seek ways for faster and more efficient drug approval, especially those needed for breakthrough cancer treatments.
Global Collaboration: The regulatory organizations are of great concern as they should align their policies thereby allowing affected countries to borrow innovative ideas concerning the necessary regulations consequently making things better.
Simplified Bureaucratic Processes: Reducing administrative burdens can make it easier for patients to enroll in financial aid programs and clinical trials.
4. Enhancing Awareness and Education
Educational Campaigns: Governments and NGOs should conduct awareness drives on available treatments and clinical trials.
Training for Healthcare Professionals: Specialized training programs should be implemented to equip medical personnel with the latest oncological advancements.
Community Engagement: Involving local leaders and patient advocacy groups can help break cultural stigmas around cancer treatment.
5. Promoting Local Research and Innovation
Investing in Domestic R&D: Encouraging local pharmaceutical industries to develop affordable alternatives that can enhance accessibility.
Encouraging Generic and Biosimilar Production: Reducing dependency on expensive branded drugs can lower treatment costs.
Expanding Clinical Trials in Developing Regions: Incentivizing research institutions to conduct trials in underserved areas can increase participation and access.
While innovation in cancer treatment has progressed significantly, access remains a critical challenge. By addressing economic, geographical, regulatory, and educational barriers, we can bridge the gap between groundbreaking therapies and the patients who need them the most. Through policy reforms, technological advancements, and global cooperation, equitable cancer care can become a reality,

ensuring that every patient, regardless of their location or financial status, receives the best possible treatment.

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):
Artificial intelligence can help create cost-effective diagnostic tools for the early detection of cancer. Telemedicine services can be broadened to facilitate remote consultations and cancer awareness. Pharmaceutical companies might implement tiered pricing strategies to ensure affordable access. Mobile healthcare units can deliver treatment to communities with limited resources. Microfinance initiatives and blockchain technology can improve transparency and efficiency. Interactive applications can inform the public about cancer prevention and the importance of early screening.

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 following gaps exist:
1. In India, the cost of cancer treatment often exceeds the annual income of 80% of the population as most treatments are expensive.
2. Many low middle-income countries (LMIC) lack specialized cancer-centres and there is a shortage of oncologists.
3. Lengthy approval processes for new drugs, treatments, fragile supply-chains and reliance on third-party distributors delay their availability.
4. Inadequate screening programs, stigma, misinformation and low awareness levels lead to late-stage diagnoses, reducing survival rates.
5. LMICs often rely on research and innovations from high-income countries, which may not always be applicable to their contexts.

Novel ways to bridge the gaps:
1. We can utilize artificial intelligence to create affordable diagnostic tools that can assess medical images or biomarkers for the early identification of cancer, pinpoint high-risk groups, and develop focused screening initiatives.
2. We can expand telemedicine networks to provide consultations, remote pathology services and collaboration with local healthcare providers who are trained in cancer education to build hybrid care models reducing the need to travel to specialized centers.
3. We can encourage pharmaceutical companies to adopt "tiered pricing" models or "socially responsible licensing" for patented cancer drugs, allowing affordable-access. Develop public-private partnerships where companies donate medicines or offer them at subsidized rates through government programs.
4. We can allocate resources to mobile healthcare units that are outfitted with diagnostic equipment, chemotherapy-facilities, and qualified medical staff to provide treatment directly to underserved populations, as well as conduct awareness initiatives.
5. We can create microfinance schemes or low-interest loans specifically for cancer patients and collaborate with NGOs to provide grants or crowdfunding platforms dedicated to cancer care.

6. Use blockchain technology to enhance transparency and efficiency in the distribution of cancer medicines, ensuring timely access and minimizing corruption in supply chains.
7. We can develop interactive apps that educate the public about cancer prevention, symptoms, and the importance of early screening.

Full Name:
Pankaj deep Rana

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Metro Hospital and Cancer Institute

State:
Delhi

Objective of your solution: (Briefly define the primary outcome of your solution to this challenge):
Future of equitable cancer care lies in blending technology, policy, and community-driven models to bypass traditional barriers. By rethinking financing, manufacturing, and delivery, we can ensure breakthroughs reach those who need them most, not just those who can afford them.

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.):
Gaps in access to innovation in cancer care
1. Lack of awareness and screening, mainly in rural areas resulting in late-stage diagnosis
2.Limited access to new diagnostic techniques (liquid biopsies) and newer therapies (targeted therapies).
3. Economically cancer diagnosis and treatment is expensive due to custom charges on medical equipment, medications, limited domestic R&D. Out of pocket expenditure, and limited insurance coverage.
4. Infrastructural challenges are there, a shortage of skilled personnel in comparison to the increasing cancer burden.
5. Inequities in clinical trials and research as global trials exclude Indian populations, leading to uncertain efficacy/safety data for local use
6. Genomic databases (e.g., TCGA) are Western-centric, reducing relevance for Indian patients
Bridging the gaps:
1. AI-assisted diagnostics: with low-cost AI tools on smartphones to be used in resource-limited settings.
2. Through mobile applications: Developing apps in regional languages for ease of the patient and relatives to know the different diagnostic and therapeutic modalities via virtual means
3.Mobile cancer units: Deploy vans equipped with diagnostics, telemedicine and basic treatment like oral chemotherapies.
4. Crowdsourced drug discovery: Platforms like Open-Source Pharma allow global researchers to collaborate on affordable therapies
5. Regional manufacturing hubs: partners with local producers to cut costs (eg. Indian generic drug model)
6.Treatment tourism: High-income countries sponsor patients in low-resource regions.
7. Cancer literacy campaign: Using social media influencers /community leaders to reduce stigma, rewarding patients for adhering to treatment.
8.Religious/community networks: Churches, mosques and NGOS distribute cancer screening kits and education.
9. Peer to patient networks: Former patients crowdfund or mentor new patients through treatment access hurdles

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Full Name:
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State:
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Objective of your solution: (Briefly define the primary outcome of your solution to this challenge):
Primary outcome:

1. Cut cancer treatment costs by 50-80% using tiered pricing and local generic production.
2. Expand access via mobile tools (portable ultrasounds) and telemedicine.
3. Speed up drug approvals through regional cooperation (e.g., African joint reviews). >Train local healthcare workers via tailored programs.
4. Prioritize high-burden cancers (cervical, breast) in national plans

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.):
Bridging the Gap Between Innovation and Access in Cancer Treatment
Gaps in Access to Innovations
1. Cost Barriers:
a. High prices of novel therapies (e.g., CAR-T, immunotherapy) and diagnostics (NGS, PET-CT).
b. Limited insurance coverage in LMICs; majority of cancer costs are out-of-pocket.
2. Infrastructure Deficits:
a. Lack of advanced radiotherapy, molecular labs, and cold-chain logistics in rural areas.
3. Regulatory Delays:
a. Slow approvals for biosimilars/targeted therapies.
4. Workforce Gaps:
a. Shortage of oncologists and trained technicians.
5, Research Inequity:
a. Limited clinical trials are conducted in LMICs, limiting data on local efficacy/safety.
Novel Solutions to Bridge the Gap
1. Affordability Innovations:
a. Tiered Pricing: Differential pricing based on GDP (e.g., Merck's HPV vaccine in Rwanda at $4.50/dose).
b. Patent Pools: Expand Medicines Patent Pool (MPP) to include cancer drugs (e.g., lenvatinib).
c. Local Manufacturing: Partnerships (e.g., Cipla-BioMerieux) to produce generics/biosimilars.
2. Tech-Driven Access:
a. AI/Telemedicine: AI tools (e.g., AI-based pathology) for rural diagnostics; teleconsultations for specialist input.
b. Mobile Units: Portable devices (e.g., handheld ultrasound) for decentralized screening.
3. Policy & Partnerships:
a. Regulatory Harmonization: To accelerate approvals.
b. Bulk Procurement: To negotiate lower prices.
c. Licensing: Legal frameworks to produce generics.
4. Capacity Building:
a. Training Hubs: Regional centres to upskill oncologists and nurses.
b. Adaptive Trials: LMIC-centric trials (e.g. India`s NCI-CTC) to generate local evidence.
5. Patient Advocacy:
a. Demand Creation: Survivor-led campaigns to pressure policymakers.
b. Digital Literacy: Apps (e.g., MyCancerCoach) to educate patients on innovations.

Full Name:
Soumya BM

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Objective of your solution: (Briefly define the primary outcome of your solution to this challenge):
By addressing the gaps with systemic, collaborative solutions, we can make innovative cancer care truly inclusive and life-saving for all.

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.):
Bridging the gap between innovation and access in cancer treatment is essential to ensure that all patients—regardless of where they live or how much they earn—can benefit from medical advances. While breakthroughs like immunotherapy, targeted therapies, and precision oncology are transforming cancer care, many patients, especially in low- and middle-income countries like India, are unable to access these treatments. One major challenge is cost—newer therapies are often expensive, and without strong insurance coverage, many patients simply cannot afford them. Limited infrastructure and a shortage of specialists outside major cities also mean that even if the drugs are available, the systems to deliver them effectively are lacking. Regulatory delays and low awareness among patients and clinicians about new treatment options further widen the gap. To bridge these gaps, we need multi-level solutions. Public-private partnerships can reduce the cost of treatment through access programs, local manufacturing, and price negotiation. Governments can strengthen national health insurance to cover advanced therapies, easing the financial burden on families. Telemedicine and mobile care units can bring cancer care closer to rural and underserved communities. Another key step is investing in training for healthcare providers—so they're aware of the latest treatments and how to use them. We also need to improve diagnostic capacity for precision treatments to be used effectively. Ultimately, bridging the innovation-access gap isn't just about new medicines—it's about building systems that deliver these advances to every patient, with equity and dignity.

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):
To reimagine the pathway from bench to bedside—ensuring that every spark of innovation in cancer care becomes a torch of hope for all, not just a privileged few. This proposal aims to identify systemic barriers that limit access to cutting-edge treatments and to chart a visionary roadmap that bridges science and society, discovery and delivery, promise and possibility. By exploring equitable models, digital health innovations, and policy reforms, the goal is to ensure that breakthroughs in oncology aren't confined to journals and labs but become life-changing realities for patients in every corner of India—and the world.

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.):

While innovation in oncology—CAR-T therapies, checkpoint inhibitors, and precision diagnostics—is racing ahead, access lags tragically behind. In India and many LMICs, geography, affordability, and awareness remain key barriers. The real challenge is not inventing the future of cancer care—it's democratizing it.

1. Gaps in Access: High cost of novel therapies Limited availability beyond urban centers. Lack of local clinical trials and real-world data. Inadequate insurance coverage. Low awareness among patients and primary care providers

2. Bridging Strategies:

a) Tiered Pricing and Local Manufacturing Encourage pharma partnerships with government to introduce tiered pricing models. Incentivize local biosimilar production to reduce dependency on imports.

b) Digital Oncology Hubs Leverage telemedicine and AI-powered diagnostics to decentralize specialist consultations and screening—especially for rural India.

c) Access-Accelerator Platforms Create a national Innovation-to-Access task force that fast-tracks regulatory approvals, expands compassionate use programs, and ensures early reimbursement models.

d) Community-Based Clinical Trials Invest in infrastructure to conduct multi-centric, low-cost clinical trials that reflect Indian population diversity and provide early access to therapies.

e) Awareness + Advocacy Launch multilingual cancer literacy campaigns. Engage NGOs, community health workers, and survivor champions to bridge trust and knowledge gaps.

Conclusion: Innovation saves lives—but only when access follows. A future-ready India must not only invent the next cancer breakthrough—it must ensure no patient is left behind in the wait for it.

Full Name:
Prabhu Pandian

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Objective of your solution: (Briefly define the primary outcome of your solution to this challenge):
Equitable access to innovative cancer treatments for all patients, regardless of geographic location or socioeconomic status.

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.):

Critical Gaps in Access to Cancer Innovations Geographic Inequity: 90% of breakthrough therapies reach high-income countries first (5–10-year delay in LMICs). Cost Barriers: CAR-T therapy exceeds India's annual per capita income by 200x. Infrastructure Deficits: Only 5% of Indian hospitals can administer advanced immunotherapies. Knowledge Asymmetry: Rural oncologists unaware of latest protocols (e.g., ADC use in HER2-low breast cancer)

Breaking Barriers at Scale

A. "Global Innovation Fast-Track" WHO-Prequalification for Cancer Drugs: Parallel review by ICMR/CDSCO with Western regulators to slash approval delays. Compulsory Licensing 2.0: Mandate pharma to share patents with LMIC manufacturers if access is delayed >2 years.

B. "Frugal Innovation Engine" CAR-T: IITs develop allogeneic CRISPR-edited CAR-NK cells using public funding. AI-Compressed Trials: Synthetic control arms cut trial costs by 60%, accelerating LMIC participation
C. Last-Mile Delivery Networks" Drone Chemo Couriers: Zipline-style delivery of cold-chain biologics to PHCs. Modular "Plug-and-Play" Cancer Pods: Shipping-container clinics with tele-oncology links to tertiary centers.
D. Knowledge Equalizer" AI-Clinical Assistant (OncoGPT): Translates latest NCCN/ESMO guidelines into vernacular protocols. Alert rural MDs when patients qualify for innovations (e.g., "This TNBC case matches TROP-2 ADC trial").
E. "Outcome-Based Financing" Pay-for-Cure Bonds: Investors fund innovative therapies; repaid only if patients achieve 5-year remission.

Full Name:
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Objective of your solution: (Briefly define the primary outcome of your solution to this challenge):
Steps to improve access to innovative treatments and diagnostic modalities in cancer care to Indian patients

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.):
Improving access to innovative cancer treatments and diagnostic modalities for Indian patients requires addressing systemic, economic, and infrastructural challenges while leveraging technology and policy reforms.
1. Strengthening Infrastructure and Regional Access India's cancer care is urban-centric, with only ~480 comprehensive cancer centers for 1.4 billion people, 40% concentrated in metros. Establishing regional cancer hubs in tier-2/3 cities and rural areas, as initiated by the National Program for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases and Stroke (NPCDCS), can decentralize care. Equipping these centers with advanced diagnostics like PET-CT (costing ₹10-50 lakh/unit) and treatment modalities (e.g., linear accelerators) ensure broader reach. Telemedicine and teleradiology, scaled through public-private partnerships, can connect remote patients to specialists, reducing travel costs (often ₹5,000-20,000 per trip).
2. Subsidizing Costs and Expanding Insurance Innovative treatments like CAR-T cell therapy or immunotherapies (₹1-4 lakh/dose) and diagnostics like NGS (₹50,000-₹1 lakh) are prohibitively expensive, with 60% of healthcare costs out-of-pocket. Expanding Ayushman Bharat-PM-JAY to cover targeted therapies, biosimilars, and molecular diagnostics can alleviate financial burdens for 50 crore low-income beneficiaries. Price controls on essential cancer drugs, as enforced by the National Pharmaceutical Pricing Authority, and promoting local biosimilar production (e.g., trastuzumab biosimilars, 30-40% cheaper) can reduce costs. Bulk procurement for public hospitals can further lower prices by 20-30%.
3. Enhancing Diagnostic Availability Early detection is critical, yet 70% of cancers in India are diagnosed at advanced stages due to limited screening. Deploying cost-effective, India-specific tools like AI-driven imaging (₹10,000-20,000/test) and liquid biopsies can improve accuracy. Subsidizing NGS and integrating it into PM-JAY ensures precision diagnostics for therapies like EGFR inhibitors in lung cancer. Training community health workers (ASHA) to promote low-cost screening methods,

such as visual inspection with acetic acid for cervical cancer, can boost early detection in rural areas, where 69% of the population resides.
4. Building Workforce Capacity With only 1 oncologist per 900,000 people, India faces a severe specialist shortage. Expanding oncology training through medical colleges, as supported by NPCDCS, and offering CME programs on novel therapies (e.g., immunotherapy) can upskill 5,000+ clinicians. Incentivizing specialists to serve in underserved areas via stipends (₹50,000-₹1 lakh/month) can balance distribution.
5. Fostering Innovation and Research India's genetic diversity (e.g., high EGFR mutations in lung cancer) demands localized research. Initiatives like the Department of Biotechnology's Cancer Moonshot and ICMR's DIAMOnDS project support affordable diagnostics and therapies. Collaborations with global firms for clinical trials can introduce cutting-edge treatments like oncolytic viruses at reduced costs. National cancer registries must expand to cover >10% of the population, guiding evidence-based policies.
6. Policy and Awareness Legislation mandating insurance coverage for innovative treatments and tax exemptions on imports can lower costs. Culturally tailored campaigns via ASHA workers and digital platforms can counter stigma, encouraging 30-40% higher screening uptake. Multidisciplinary tumor boards in hospitals can optimize treatment plans, ensuring access to therapies like atezolizumab for hepatocellular carcinoma.

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Objective of your solution: (Briefly define the primary outcome of your solution to this challenge):
In today's cancer landscape, advancements in medical innovation have proven vital in combating cancer but the ground reality in LMICs is that millions of cancer patients do not have access to quality cancer care. This is a result of systemic deficiencies and can't be fixed solely with simple price cuts.
Local regulatory requirements disconnected operational infrastructure, shortage of trained personnel and, most critically, the heavy financial implications for patients and their families combine to make LMIC markets financially risky and operationally challenging for pharmaceutical companies.
Yet, the need for quality cancer care for millions affected remains unfulfilled in these regions.
Navigating this complex terrain needs the situation to be broken down into smaller, tackleable problems.
The cost of implementation is high but the cost of inaction is higher and will only widen the gap over time.
My solution aims to end this drought by establishing a systemic alliance that generates and leverages financial, operational, and reputational value across stakeholders to achieve democratization & equity of quality cancer care. Stakeholders gain aligned value: governments achieve health impact, manufacturers access sustainable markets, donors maximize social returns, healthcare systems build capacity, and patients receive affordable, accessible, life-saving treatments.

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 systemic deficiencies can be classified under Economics, Infrastructure, Data Analytics, Finance & Governance.

1. Economic Gap:

Treatment cost exceeds annual household income in >50% of cases.
2. Infrastructure Gap:
Lack of tertiary care hospitals, diagnostics, trained personnel creates operational inefficiencies.
3. Lack of Shared Data Pipelines & Analysis:
Prevents stakeholders from quantifying impact.
Governments hesitant to fund new therapies; manufacturers lack real-world treatment data to localize solutions.
4. Lack of Governing Body:
Stakeholders (Governments, Manufacturers, Donors, Health Systems) work in silos, missing opportunities to leverage collective strengths.
A neutral body, like GAVI in vaccines, to facilitate stakeholders' collaboration for aligned, sustainable solutions, but Cancer Care Complexity (Multi-step treatments, wide drug spectrum and low political priority) makes collaboration difficult.

Staggered Solution Roadmap: The Global Cancer Alliance

Utilizing a robust prioritization and classification framework of cancer markets- balancing affordability, treatment complexity, patient volume and system readiness- allows the neutral body to prioritize and execute customized solutions.

1. Pooled procurement: [High Volume, Generic Treatments]
   - MOUs to be negotiated between healthcare systems, government and manufacturers.
   - Manufacturers to be guaranteed volumes in return for lowered prices.
2. Philanthropic programs: [Low Volume, Generic Treatments]
   - Deprioritised by governments due to relatively lower impact.
   - Facilitated primarily with donor capital.
3. Risk Sharing agreements: [High Volume, Personalised Treatments]
   - Introduce shared risk dynamic where philanthropic organisations are involved early on to reduce financial burden.
   - Data pipelines are allowed to mature giving a better understanding of the market.
   - Governments to incentivise manufacturers by relaxing regulatory requirements and in return secure Outcome Based Pricing.
   - Integrated Patient Access Programs: [Low Volume, Personalised Treatments]
   - Systemic integration of PAPs is necessary to streamline and iron out eligibility requirements, establish robust supply-chain, increase approval % & improve awareness to prevent under utilisation.
   - This roadmap aims to transform cancer care from fragmented, high-risk ventures into an equitable, scalable and sustainable system that's accessible for all.

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Ruhi Kumar

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Objective of your solution: (Briefly define the primary outcome of your solution to this challenge):
Problem Statement: All Cancer Hospitals across the country require the patient to be accompanied by a family member or an “attender”. This individual must be responsible for the patient from the moment they enter the hospital to the time they step outside. The patient is not admitted into the ward without one, cannot receive chemotherapy, cannot undergo surgery, cannot receive blood transfusions etc. Their

treatment is deferred to such a time where they do come back with an attender. Consider Mrs A. She is a 69-year-old female, a case of locally advanced breast cancer on curative intent neoadjuvant chemotherapy. She comes to the OPD with a delay of 1 week for when she was due for the next cycle because her husband has expired. She lost her only son when he was in his early 20s and now has lost the last remaining member of her family who was accompanying her to the hospital regularly. Yet she manages to reach the OPD alone because she understands the importance of continuing her cancer treatment. Consider Mrs B. She is a 37-year-old female, a case of metastatic breast cancer on palliative chemotherapy. During the course of her treatment her husband abandons her, and she is shunted to an outhouse in the home of her sister where she is not allowed to interact with her sister, nieces and nephews. Yet she manages to reach the OPD with a different neighbor each time unsure whether there will be anyone to accompany her for her next cycle. Consider Mrs C. She is a 78-year-old female, a case of recurrent GIST who requires assistance while walking. She is the only surviving member of her family. She has to pay an outsider each time to accompany her to the hospital because she is required support to walk the extreme ends of the hospital to pharmacy and for the admission process. Yet she manages to reach the OPD, literate enough to know that her total counts are low and she must find an attender to accompany her back to the hospital next week once her blood counts recover. Unfortunately, we see such scenarios on a daily basis in our OPDs. This leads to delayed treatment like in case of Mrs A, irregular, ineffective treatment like in case of Mrs B or even social issues where Mrs C is vulnerable to malicious intent of strangers who are after her money and assets. I offer the following, real-world solution to these problems.

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: The solution is to identify and match such patients with a caregiver that can accompany them for the duration of their treatment. This will benefit the patient greatly in terms on receiving their treatment adequately and effectively without the added pressure of finding reliable individuals for their next visit. Minimal first aid training and basic knowledge of cancer patient care can be taught to the community volunteers. An outreach program to access patients in a door-to-door manner in the suburbs and villages already exists in the various states. For example, in the state of Tamil Nadu, a trained nurse or VHN (village health nurse) is the first point of contact in the primary healthcare centers (PHC). Accredited Social Health Activists (ASHA) workers are trained for a similar purpose in the field of maternal and child health. However, a single VHN may be responsible for up to 1 to 1.5 lakh people. This may add undue pressure on already limited resources. Pharma companies like Roche enjoy a position where they can deploy resources to offer such services. An example would be for a patient who has purchased Pertuzumab may be offered this service of employing a caregiver to take the patient to and from their home. It will of course include a system of checks and balances where only the patient fulfilling the eligibility criteria may be given this option. This service can be made available for a minimal fee as an additional service to eligible patients. This eliminates exploitation of vulnerable patients like Mrs C and ensures the timely treatment of curative intent patients who can live full lives post therapy like Mrs A. Companies like Roche have the capacity to spearhead an effort at the grassroot level. It increases employment in the community with an added benefit of increased cancer awareness. It is a structured, executable solution to increase compliance among cancer patients. It will set an example for other companies that enjoy the same privileges to improve access to patient care. At a policy level, it can be included into the National Programme for Prevention and Control of Cancer, Diabetes, Cardiovascular Diseases, and Stroke (NPCDCS) in the long term.

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Objective of your solution: (Briefly define the primary outcome of your solution to this challenge):
The primary outcome of implementing robust Patient Access Programs (PAPs) and strengthening healthcare infrastructure is to reduce financial and systemic barriers to innovative cancer treatments. Together, these approaches aim to improve timely access, ensure equitable delivery of advanced therapies, enhance treatment adherence, and ultimately improve clinical outcomes for underserved patient populations. Despite rapid advancements in cancer treatment innovations—such as targeted therapies, immunotherapies, and precision medicine—the gap between these breakthroughs and patient access remains significant, especially in low- and middle-income countries (LMICs). Barriers include high costs of novel therapies, limited healthcare infrastructure, lack of trained oncology specialists, and inadequate diagnostic facilities.

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 bridge the gap between innovation and access in cancer treatment, the establishment of robust Patient Access Programs (PAPs) in tandem with strategic investments to strengthen healthcare infrastructure is an option. Patient Access Programs, developed through partnerships between pharmaceutical companies, governments, and non-governmental organizations, can provide subsidized or free access to innovative therapies for eligible patients, reducing financial barriers. Concurrently, targeted investment in diagnostic and treatment facilities—along with healthcare professional training—will enhance the capacity to deliver these therapies safely and effectively. This integrated approach ensures not only affordability but also availability and quality of cancer care, especially in underserved regions

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Objective of your solution: (Briefly define the primary outcome of your solution to this challenge):
The chasm between cancer treatment innovation and patient access is a multidimensional challenge requiring a multipronged solution. While scientific progress has been extraordinary, its benefits will only be fully realized when equitable access becomes a central pillar of cancer care strategies. Governments, industry, healthcare providers, and patient advocacy groups must work in unison to redesign healthcare ecosystems that are inclusive, sustainable, and innovation-ready. Only then can the promise of modern oncology truly reach every patient, regardless of geography or economic status.

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 Gaps in Access to Innovations in Cancer Treatment
1. Economic Disparities

- High Cost of Innovative Therapies: Treatments like CAR-T cell therapy, immune checkpoint inhibitors, and targeted therapies often cost thousands of dollars per cycle, making them unaffordable for many patients without robust insurance or public funding.
- Limited Reimbursement Policies: In several countries, especially low- and middle-income countries (LMICs), national health insurance systems do not cover cutting-edge therapies.

2. Geographical Inequities

- Urban-Rural Divide: Specialized oncology centers equipped to deliver advanced treatments are often located in urban areas, leaving rural populations underserved.
- Limited Infrastructure: In many regions, hospitals may lack facilities to safely administer complex treatments like immunotherapy or perform genomic testing required for precision medicine.

3. Regulatory and Logistical Barriers

- Delayed Approvals: Regulatory lag in LMICs means that new drugs approved in the US or EU may take years to become available elsewhere.
- Supply Chain Challenges: Fragile or fragmented supply chains can disrupt availability of critical medicines and diagnostic tools.

4. Knowledge and Awareness Gaps

- Lack of Clinician Training: Healthcare providers may lack the training to appropriately prescribe or manage advanced therapies.
- Patient Education: Patients in underserved areas often lack awareness about newer treatment options, reducing demand and uptake.

Novel Ways to Bridge the Innovation-Access Divide

1. Flexible Pricing and Financing Models

- Tiered Pricing: Implement differential pricing strategies based on country income levels to improve affordability.
- Risk-Sharing Agreements: Outcome-based pricing models where payers reimburse only if the therapy is effective.
- Global Health Financing Initiatives: Expand funding from global organizations (e.g., Gavi-like models for oncology) to support access to innovations.

2. Technology Transfer and Local Manufacturing

- Voluntary Licensing: Encourage pharmaceutical companies to license patented therapies to local manufacturers.
- Public-Private Partnerships: Collaborative models between governments, industry, and NGOs to establish local production units for diagnostics and biologics.

3. Decentralized Care Delivery Models

- Hub-and-Spoke Networks: Centralize complex treatments in tertiary centers (hub) while providing follow-up and supportive care through satellite centers (spokes).
- Tele-oncology Services: Use telemedicine platforms to bring expert care to remote regions and support local oncologists.

4. Regulatory Harmonization and Capacity Building

- Accelerated Approval Pathways: Harmonize regulatory frameworks across regions to fast-track approvals of essential drugs.
- Capacity Building: Strengthen local regulatory agencies through technical assistance and training programs.

5. Strengthening Cancer Registries and Research Capacity

- Inclusive Clinical Trials: Promote inclusion of patients from diverse backgrounds and countries in global clinical trials.
- Local Data Generation: Invest in real-world evidence platforms and cancer registries to inform treatment protocols tailored to local needs.