

DELIBERATIVE POLLING[®] ON ANTIMICROBIAL RESISTANCE

QUALITATIVE REPORT
JUNE 2026

Introduction

This document presents qualitative findings from the AMR Deliberative Poll, a deliberation that examined participants' views on critical policy proposals related to antimicrobial resistance and antibiotic access. The deliberation engaged participants in structured discussions about the complex balance between ensuring access to essential antibiotics and preventing misuse that contributes to antimicrobial resistance.

Across all sessions, several cross-cutting themes emerged consistently. Participants emphasized the fundamental importance of equitable access to antibiotics, particularly for low-income and rural populations who face significant barriers including cost, distance from healthcare facilities, and inadequate infrastructure. However, this concern for access was almost universally tempered by anxiety about antimicrobial resistance and the consequences of misuse. Participants repeatedly stressed that any expansion of access must be accompanied by professional oversight, education, quality assurance, and robust regulatory systems.

A common trend throughout the discussions was the gap between what was considered “ideal” policy and actual implementation of said policy. While participants often supported principles such as monitoring informal sales or ensuring affordable supply, they frequently questioned the feasibility of proposals given limited government resources, concerns about corruption, and the challenges of regulating informal markets. Trust emerged as a critical issue—both trust in government capacity to implement and enforce regulations, and trust in various actors (informal sellers, pharmacists, veterinary assistants) to dispense antibiotics responsibly.

The proposals examined in this poll required participants to navigate difficult trade-offs between health equity, public health security, economic constraints, and governance challenges. Their deliberations reveal both the urgency of addressing antibiotic access gaps and the complexity of doing so in ways that protect against the growing threat of antimicrobial resistance.

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Session 1

Session 1 focused on foundational issues of antibiotic access, distribution, and quality control. Discussions addressed the challenge of ensuring equitable access to antibiotics while preventing the misuse that contributes to antimicrobial resistance. Participants grappled with proposals spanning human and animal health, exploring how to expand access through both formal and informal channels while maintaining the appropriate oversight. Key themes included the critical importance of professional supervision, the need for quality assurance mechanisms, the challenges of implementing monitoring systems in resource-constrained settings, and persistent concerns about corruption undermining regulatory efforts. Participants also examined the role of diagnostic testing in guiding appropriate antibiotic use and the need for manufacturer accountability in preventing environmental contamination. Throughout these discussions, a tension emerged between the immediate need to save lives through increased access and the long-term goal to preserve antibiotic effectiveness by preventing resistance.

1. Access to Antibiotics

Proposals Discussed:

- **Proposal 1:** Governments in low- and middle-income countries should ensure appropriate access to antibiotics for all citizens including those who are challenged in accessing the health system.
- **Proposal 2:** Governments in low- and middle-income countries should increase access to appropriate antibiotics to support all farmers (including those who have little access to veterinarians).
- **Proposal 3:** Governments should develop clear guidelines and support for controlled informal dispensing of the most widely needed basic oral antibiotics without a veterinarian's prescription via veterinarian assistants or allied veterinary professionals. Veterinarian assistants or allied veterinary professionals should be allowed to dispense antibiotics to farmers for a limited number of infections in livestock.
- **Proposal 4:** An international initiative is needed to ensure an affordable steady supply of quality-assured basic oral antibiotics in the low- and middle-income countries including local manufacturing.

Participants' discussions centered on the critical need to improve access to antibiotics, particularly for low-income and rural populations. This core issue of access was consistently weighed against the significant risks of misuse and the development of antimicrobial resistance. Discussions explored the roles of governments and international bodies in ensuring that antibiotics are not only available but also affordable, high-quality, and used responsibly in both human and animal health.

Proposal: Ensure citizen antibiotic access

There was broad agreement that governments in low- and middle-income countries should ensure appropriate antibiotic access for all citizens. Participants framed this as a fundamental

issue of equity and a government responsibility, arguing that access saves lives, especially for those who cannot afford medicine or live far from health facilities. Many highlighted the prohibitive cost of antibiotics, noting that even when public healthcare is available, essential medicines are often out of stock, forcing people to buy them at high prices. One participant stated, "many children, young people and adults are dying, often due to a lack of antibiotics." The unique challenges of rural areas, such as poor infrastructure and long travel times to clinics, were a recurring justification for improving access.

However, this support was almost always conditional on implementing strong controls to prevent misuse. A primary concern was that increased access could worsen antimicrobial resistance if not properly managed. Participants repeatedly stressed the need for "oversight, because otherwise it becomes a mess." They called for access to be managed by qualified professionals who can provide a "correct diagnosis," emphasizing that distribution must be paired with medical supervision and public education on correct usage. A few participants expressed direct opposition, arguing that greater access would inevitably "make the bacteria much more resistant" or that simply providing drugs is useless if people do not know how to use them correctly. Others questioned the feasibility of the proposal, citing limited government budgets and political will.

Proposal: Increase farmer antibiotic access

This proposal was met with significant concern and opposition. The predominant view was that increasing farmers' access to antibiotics is dangerous due to the high risk of misuse in livestock. Participants worried that farmers prioritize profit over health, leading to the "abusive use of antibiotics in cattle, chicken and the things we eat." Several participants pointed to the practice of using antibiotics to fatten animals, which they felt was harmful because "these antibiotics end up reaching us in the form of consumption." This misuse, they argued, contributes to antimicrobial resistance and poses a direct threat to human health.

A smaller number of participants supported increasing access for farmers, viewing it as necessary for animal welfare and to support farmers in remote areas who have little access to veterinarians. One participant noted from experience that without antibiotics, sick animals are often killed instead of treated. Those who were cautiously open to the idea stressed that it must be accompanied by education and professional guidance to ensure responsible use.

Proposal: Allow vet assistant dispensing

Participants were divided on allowing veterinary assistants to dispense antibiotics without a prescription, with a majority expressing opposition. Many felt that dispensing without a prescription was inherently "dangerous" and that a professional diagnosis is essential for both animals and humans to ensure correct treatment and dosage. The risk of creating resistant bacteria, or "super substances," was a key reason for this opposition. One participant cited a local news story about addiction to an animal drug as a reason for their fear.

Conversely, a minority of participants supported the proposal as a practical solution for remote and rural areas where veterinarians are scarce. They argued that veterinary assistants are "a person who has the knowledge that will tell you what the dose is so that high resistance does not occur." This support was often conditional, with some suggesting it could be acceptable only for first aid in emergencies.

Proposal: Ensure affordable antibiotic supply

This proposal garnered widespread and strong support. Participants consistently identified the high cost of antibiotics as a primary barrier to access for low-income populations. Many shared personal experiences of being unable to afford or find even basic antibiotics like Amoxicillin in public pharmacies. The need for an international initiative was seen as a way to help low-income countries that lack resources and to ensure supply when profitability for private companies is low. Suggestions for implementation included government subsidies, price controls, and promoting local manufacturing to reduce costs.

Crucially, participants linked affordability directly to the need for quality assurance. There was a strong sentiment that any initiative must guarantee that medicines are not substandard or counterfeit. One participant stated, "it is not enough to have quantity; it must have quality." They called for strict regulation, certification, and government oversight to prevent the circulation of "fake low quality antibiotics" that could be ineffective or harmful. Some participants raised concerns about the feasibility of local manufacturing due to high costs and competition from large pharmaceutical companies, while others worried that government price controls could lead manufacturers to stop production.

Concluding Synthesis:

The discussions on antibiotic access revealed strong support for improving availability, particularly for vulnerable populations, but this support was inseparable from concerns about responsible use and quality control. Participants demonstrated sophisticated thinking about the dual challenge of expanding access while preventing misuse. They consistently emphasized that access alone is insufficient—it must be paired with professional oversight, patient education, and quality assurance mechanisms. The disagreements between immediate health needs and long-term resistance concerns shaped all deliberations, with participants seeking solutions that address both imperatives simultaneously. Support was strongest for proposals that combined accessibility with clear safeguards, particularly the international initiative to ensure affordable, quality antibiotics. Proposals related to animal health faced greater skepticism due to concerns about profit motives overriding health considerations and the perception that veterinary use of antibiotics poses risks to human health through the food chain.

2. Informal Dispensing

Proposals Discussed:

- **Proposal 1:** Governments should develop clear guidelines and support for controlled informal dispensing of the most widely needed basic oral antibiotics without a doctor's prescription via registered pharmacists. Registered pharmacists should be able to dispense required basic oral antibiotics over the counter for some community-acquired infections.

- **Proposal 2:** Governments should develop monitoring (and evaluation) mechanisms to include the recording of informal sales of antibiotics.
- **Proposal 3:** Governments should report the volumes of sales from these informal sources annually to the Global Antibiotic Surveillance System (a global monitoring system set up by the World Health Organization).
- **Proposal 4:** Governments should incentivise informal sellers to use only quality-assured antibiotics.

Participants' discussions on informal antibiotic dispensing centered on the tension between improving access to essential medicines and mitigating the significant risks of misuse, particularly the development of antimicrobial resistance. Proposals to allow dispensing without a doctor's prescription were primarily evaluated on their potential to address healthcare gaps in rural or low-income areas versus the dangers of self-medication, incorrect diagnosis, and lack of professional oversight. Across all proposals, the necessity of regulation, training, and quality control was a dominant theme, shaping both support for and opposition to expanding access outside of traditional medical channels.

Proposal: Guide controlled informal dispensing

This proposal was met with widespread opposition, largely stemming from a fundamental distrust of the term "informal." Many participants argued that informal systems are inherently uncontrollable and untrustworthy. The primary concerns were that such dispensing would lack professional supervision, encourage harmful self-medication, and ultimately worsen antimicrobial resistance. A core belief was that antibiotics must be preceded by a professional diagnosis, with one participant asserting that "the need for it must be assessed by doctors before it can be released." In contrast, a minority of participants supported the proposal as a pragmatic solution to access issues, particularly for those in remote areas who "don't have time to see a doctor" or for treating "basic diseases." This support was conditional on the government establishing "clear guidelines" and ensuring dispensers are certified and trained.

Proposal: Allow pharmacist OTC dispensing

Views on allowing registered pharmacists to dispense antibiotics over the counter were sharply divided, though a majority expressed opposition. Critics argued that pharmacists are not qualified to diagnose illnesses, a crucial step for correct antibiotic use. Many pointed out that a pharmacist cannot identify the specific pathogen causing an infection, asking, "How can you prescribe an antibiotic without knowing the specific bacteria for the antibiotic?" Others questioned the training of pharmacy staff, with one believing "pharmacists are anyone with no information, they hire anyone, anyone with no training, the guy just goes there, he's a sales clerk, he's not a real pharmacist," and worried that a profit motive could lead to improper sales. The risk of misuse leading to increased resistance was a central concern. Supporters, however, saw this as a viable way to improve access, especially in areas with few doctors. They trusted pharmacists' professional knowledge, noting, "They have their own studies on the composition of those medications." Some also saw it as a way to reduce the burden on the healthcare system and provide faster relief for patients. This support was often contingent on strong government oversight, training, and regulation.

Proposal: Regulate informal seller dispensing

Regulating informal antibiotic sellers was a largely unpopular proposal. Most participants expressed strong distrust of informal vendors, viewing them as unqualified and profit-driven, since “it would be sold uncontrollably” and lead to stronger drug resistance. Many felt that such a system would be impossible to effectively monitor due to corruption and a lack of resources. One participant stated that “informal sales are the only thing you want to sell regardless of whether it is effective or not.” A minority supported the proposal, often arguing from a pragmatic perspective that since informal sales already occur, it would be better to “legalize what is already being done” and establish some control. This support was conditional on strict government monitoring, training, and certification for sellers. Some also noted that informal sellers are crucial for access in remote areas where they are the only option.

Proposal: Incentivize quality antibiotics for informal sellers

This proposal received very little support. The primary objection was that it is “inappropriate for the government to give incentives to unofficial sellers” whose activities are illegal. Participants argued that the government should punish rule-breakers rather than rewarding them for compliance, calling incentives a “wasteful expenditure.” There was significant skepticism about the effectiveness of such a program, with concerns that sellers would manipulate the system for personal gain or that it would not guarantee they stop selling substandard products. A few participants, however, saw merit in the idea as a way to ensure that if informal sales persist, the products sold are at least safe and effective. They argued that incentives could “encourage others to also start selling quality drugs instead of selling substandard ones” and help combat the spread of low-quality or counterfeit medicines.

Concluding Synthesis:

The informal dispensing discussions showed ambivalence about solutions that operate outside formal medical channels. Participants recognized the pragmatic reality that informal dispensing exists and serves populations with limited healthcare access, yet they remained deeply skeptical about legitimizing or expanding these practices. The fundamental issue was trust. Many people were worried about the qualifications of dispensers, motivations, and government capacity to effectively regulate informal systems. The proposal to allow pharmacist dispensing received the most balanced consideration, reflecting that pharmacists occupy a middle ground between fully informal sellers and physicians. However, even here, concerns about diagnostic capability and profit motives decreased support. Participants demonstrated a clear preference for formal healthcare systems with professional oversight, viewing informal dispensing as at best a necessary compromise and at worst a dangerous contributor to antimicrobial resistance. The rejection of incentives for informal sellers reflected a strong belief that governments should not reward illegal activity, even if such incentives might improve product quality.

3. Monitoring and Reporting

Proposals Discussed:

- **Proposal 1:** Governments should develop monitoring (and evaluation) mechanisms to include the recording of informal sales of antibiotics.
- **Proposal 2:** Governments should report the volumes of sales from these informal sources annually to the Global Antibiotic Surveillance System (a global monitoring system set up by the World Health Organization).

Participants' discussions centered on the necessity and feasibility of controlling informal antibiotic sales through monitoring and global reporting. While many agreed on the principle of monitoring to curb misuse and gather data, they frequently questioned its practicality due to costs, corruption, and the inherent difficulty of tracking informal markets. The proposal for annual global reporting was met with greater skepticism, with many viewing it as an unworkable bureaucratic step that would produce unreliable data.

Proposal: Monitor informal antibiotic sales

There was broad support for the principle of government monitoring of informal antibiotic sales. Many participants saw it as a fundamental step to prevent misuse, combat antimicrobial resistance, and ensure public safety. One participant stated, "There has to be control so that the sale [of antibiotics] is not indiscriminate and so that what we are seeing today doesn't happen." Proponents argued that monitoring would provide more accurate data on consumption, which could "help to raise awareness, and there must be education in relation to this." The data was also seen as crucial for managing supply, identifying which drugs are in demand, and combating counterfeit or expired products. Some suggested practical approaches, such as tracking inventory from laboratories to pharmacies or using technology like barcodes and web portals.

Despite this general agreement on the need for monitoring, significant concerns were raised about its feasibility. A primary obstacle identified was the inherent difficulty of tracking an informal market, with one participant asking, "If they are informal, who controls the informal ones." Many believed the proposal was "very idealistic" and would require immense resources and investment that governments may be unwilling or unable to provide. A recurring and forceful theme was the issue of corruption and a lack of trust in government. Participants worried that monitoring agents would be compromised by bribery and that the system would ultimately fail, as one noted, "If you leave it to the Brazilians to inspect, it won't work, there won't be much bribery." Others argued that monitoring was unnecessary if sales were properly restricted to prescription-only channels in the first place.

Proposal: Report informal sales globally

Fewer participants supported the proposal to report informal sales volumes to a global surveillance system, though some saw it as a logical extension of monitoring. Proponents viewed the two proposals as "complementary" actions that could lead to "better public policies." Reporting was seen as a way to increase transparency, support international cooperation, and provide a global picture of antibiotic use and resistance trends. For some,

international oversight was a potential solution to domestic corruption, as “an international body would be much more trustworthy.”

However, this proposal faced more widespread and stronger opposition. A major point of contention was the annual timeframe, which many felt was too long to be useful. One participant argued, “Annually is a long time, so several things could happen in that time that could harm people's health,” with others suggesting monthly or semi-annual reporting instead. Many dismissed the idea as unfeasible, bureaucratic, and particularly difficult for low-income countries to implement. Participants also expressed deep skepticism about the quality of the data, predicting that reports would be unreliable due to underreporting and the difficulty of tracking informal sales. Finally, some argued that the resources required for such a system would be better spent on improving access to medicine for the poor.

Concluding Synthesis:

The monitoring and reporting discussions revealed a significant gap between principle and practice in participants' thinking. While they endorsed the concept of monitoring as essential for controlling misuse and gathering crucial data, they expressed doubts about whether such systems could function effectively in practice. The core challenges identified were the contradictory nature of monitoring informal markets, limited government resources and capacity, and pervasive concerns about corruption undermining enforcement. The proposal for global reporting faced even stronger skepticism, with participants viewing it as adding an additional layer of bureaucracy that would produce unreliable data while diverting resources from more direct interventions. A notable tension emerged between those who saw international oversight as a solution to domestic governance failures and those who viewed it as an impractical burden on low-income countries. Ultimately, these discussions reflected broader concerns about governance capacity and the difficulty of implementing sophisticated surveillance systems in contexts where basic healthcare infrastructure remains inadequate.

4. Point of Care Diagnostic Tests

Proposals Discussed:

- **Proposal 1:** An international initiative is needed to ensure availability of proven/regulated point of care diagnostic tests with algorithms to drive appropriate antibiotic use in all countries including local manufacturing.
- **Proposal 2:** Governments should make currently-available, validated point of care, rapid diagnostic tests available at every primary health outlet.
- **Proposal 3:** Point of care rapid, diagnostic tests should be affordable and a part of the care pathway, and reimbursed by the State or Medical Insurance Companies.

Participants' discussions centered on the necessity of point-of-care (POC) diagnostic tests to ensure appropriate antibiotic use. While there was broad agreement on the need for such tests, the proposals on how to achieve this—through international initiatives, government provision at primary health outlets, or reimbursement schemes—were debated in terms of their feasibility, reliability, and equity. Key concerns about the accuracy of rapid tests, the high costs, and the logistical challenges of implementation were interwoven throughout the conversations on all three proposals.

Proposal: An international initiative for test availability

Participants generally supported the principle of making proven diagnostic tests available to guide antibiotic use, viewing it as a crucial step to get a "more accurate diagnosis" and ensure the "safest use of antibiotics." Many saw this as a way to reduce inappropriate prescriptions and save lives. Support for an international initiative was based on the belief that it would help tests reach "the most distant, poorest countries" and would not have to "depend on local governments to be able to function." Some also suggested that a global approach could lead to a beneficial standardized test.

However, this proposal faced significant skepticism. A primary concern was the reliability of the tests themselves. Several participants expressed a lack of trust in rapid tests, citing personal experiences with inaccurate results from COVID-19 tests and other lab work. One noted, "That's why we don't trust the rapid test very much." Others questioned the feasibility of "rapid" tests for bacterial infections, pointing out that traditional cultures can take days and that more serious conditions require "more elaborate tests" like X-rays. The concept of a globalized approach was also challenged, with some arguing it was not feasible because "each country has its own health system, and it's completely different." Finally, the cost of the tests and the investment required for infrastructure and training were seen as major hurdles.

Proposal: Provide POC tests at primary health outlets

There was considerable support for making validated rapid diagnostic tests available at every primary health outlet. Participants saw this as a practical way to "speed up diagnosis and treatment" and ensure tests are accessible, especially for rural communities. One participant stated that having tests at local centers would be key to making "appropriate use of the treatment." This approach was also favored because it would place tests in the hands of trained professionals, mitigating risks of misinterpretation. Some expressed confidence that their public health system, such as Brazil's SUS, could manage such a program.

Despite this support, many participants were doubtful about the proposal's practicality. Several pointed to existing systemic failures, such as extreme delays for basic blood tests, as evidence that health systems could not handle this initiative. One participant noted that in their area, it takes "four or five months for you to get a blood test." The difficult experience with distributing COVID-19 tests was frequently cited as a reason for skepticism. Some were unequivocal in their assessment, stating, "It doesn't work." Concerns were also raised about the high cost, the reliability of the tests themselves, and the potential for corruption in low-income countries, where one feared it would "become a mafia."

Proposal: Reimburse POC diagnostic tests

This proposal was viewed by many as a way to address the critical barrier of cost. Participants argued that tests should be affordable and that reimbursement by the state or insurance companies would encourage access. Many took this further, stating that tests should be completely free because "the vast majority of people who go to a health center can't afford to buy a test." One participant argued against the concept of reimbursement entirely, stating that since people already pay taxes, "it wouldn't have to be reimbursed because first of all we wouldn't have to pay." Others suggested government subsidies or cost-sharing models as a viable path forward.

However, there was significant doubt that reimbursement systems would function as intended. Several participants described getting insurance plans to pay for even basic services as an "eternal struggle," citing personal experiences where plans failed to cover necessary care. The bureaucracy involved was another major concern, with one participant asking, "How long will it take for the reimbursement to be released?" They argued that many people, especially the most vulnerable, would not know how to navigate the process. The high cost of subsidizing tests was also seen as a problem for low-income countries.

Concluding Synthesis:

The discussions on point-of-care diagnostic tests revealed strong endorsement of the principle that accurate diagnosis should guide antibiotic use, but deep skepticism about whether current systems could deliver on this promise. Participants valued the potential of rapid tests to improve prescribing decisions and reduce misuse, yet their personal experiences with healthcare system failures and unreliable test results undermined confidence in implementation. An issue emerged between the technical promise of POC tests and practical realities: even if accurate tests existed, participants doubted whether health systems plagued by delays, resource constraints, and corruption could distribute and administer them effectively. The cost barrier was emphasized, with participants insisting that tests must be free or fully subsidized for vulnerable populations, yet questioning whether governments or insurance systems would actually provide such coverage. International initiatives were seen as potentially helpful for bypassing weak national systems, though concerns remained about whether a global approach could accommodate diverse local health contexts. Ultimately, these discussions reflected a broader frustration with the gap between promising health interventions and the capacity of existing systems to implement them reliably.

5. National Certification

Proposals Discussed:

- **Proposal 1:** There should be national certification standards, such as the BSI Kitemark, for safe waste/outflow from the manufacture of antibiotics in all countries with penalties if standards are not met.

Participants' discussions centered on the proposal to establish national certification standards for antibiotic manufacturing, with a focus on safe waste disposal. The conversation broadly supported the need for such standards, primarily driven by concerns for environmental protection and public health. However, this support was frequently qualified by significant concerns about the practicalities of implementation, including the potential for corruption to undermine the system and the risk of increased costs for consumers. The need for manufacturer accountability was a central theme connecting these issues.

Proposal: Set antibiotic waste disposal standards

There was widespread agreement on the need for national certification standards for antibiotic manufacturing and waste disposal. Participants frequently cited the environmental damage caused by improper disposal, such as the contamination of rivers, water sources, and soil. One participant stated, "The disposal of materials can also cause disease because it causes an imbalance, right? In the fauna, in the waters they return to ours, right?" This environmental concern was directly linked to public health, with many arguing that uncontrolled waste contributes to the development of antimicrobial resistance and could even "cause a pandemic."

A core motivation for supporting the proposal was the desire to increase manufacturer accountability. Many participants felt that companies prioritize profit over public and environmental safety, believing "many companies only care about profit and profit and don't care about the environment." Certification was seen as a tool to ensure companies are "responsible for the product they're putting on the market" and to prevent the circulation of counterfeit or poor-quality products, such as an "antibiotic made with flour."

Despite strong support for the principle of certification, participants raised significant concerns about implementation and enforcement. A recurring point was that standards must be accompanied by strong penalties to be effective, as many believe people, including companies, "only learn when it hurts our pockets." However, there was deep skepticism about the ability of national bodies to enforce these standards due to corruption. Participants noted that in countries like Brazil and Colombia, "any certificate can be falsified, any inspection company can be bought," and also said that "We know that this issue of corruption is very common here, right? So we can't fully trust the control bodies." This led some to suggest that oversight from an international body would be more effective.

Several participants also worried about the negative economic consequences of the proposal. A primary concern was that the costs of compliance would be passed on to the public, making essential medicines more expensive and potentially inaccessible for low-income populations. Others feared that strict regulations would "discourage companies from manufacturing antibiotics," leading to shortages or creating monopolies that limit competition.

Concluding Synthesis:

The discussions on national certification standards revealed unanimous support for the principle of regulating antibiotic manufacturing and waste disposal, driven by urgent concerns about environmental contamination and its links to antimicrobial resistance. Participants viewed manufacturer accountability as essential, expressing frustration that companies

prioritize profit over public and environmental safety. However, this consensus on principles dissolved when considering implementation, with corruption emerging as the dominant concern. Participants demonstrated profound distrust in national regulatory bodies, believing that certification systems would be undermined through bribery and falsification. This skepticism about enforcement led some to favor international oversight, though others questioned whether any regulatory system could function effectively in highly corrupt contexts. A second major concern was economic impact—participants worried that compliance costs would be passed to consumers, making antibiotics unaffordable, or that strict regulations would discourage manufacturing and create shortages. Participants recognized the need for stronger regulation but doubted whether governance systems in low- and middle-income countries could implement such regulations without either being corrupted or inadvertently harming access to essential medicines.

Session 2

Session 2 emphasized prevention as the most effective strategy for reducing antibiotic dependence and combating antimicrobial resistance. Discussions centered on foundational public health interventions including water, sanitation, and hygiene (WASH), vaccination programs across the lifespan, and improved agricultural practices. Participants demonstrated strong support for preventative approaches, recognizing that reducing infection rates would decrease the need for antibiotics in both human and animal populations. Key themes included the fundamental importance of clean water access as a prerequisite for health, the value of comprehensive immunization programs for children, adults, and healthcare workers, and the need for improved biosecurity and vaccination in farming systems. However, implementation concerns were prominent throughout the deliberation, with participants highlighting the substantial costs of infrastructure development, the logistical challenges of reaching remote populations, and the need for public education to support behavior change. The role of government funding and international support was highlighted to be critical, particularly for areas that face resource constraints. Participants also addressed public awareness and education initiatives, recognizing the need to combat misinformation, build trust in vaccines and healthcare systems, and promote understanding of antibiotic resistance risks across diverse populations.

6. Clean Water

Proposals Discussed:

- **Proposal 1:** National governments should prioritize infection prevention tools to reduce the burden of infectious diseases.

- **Proposal 2:** Everyone should have access to clean water and safe sanitation (WASH) in their community and health system.
- **Proposal 3:** Specific government funding should go to healthcare facilities to ensure that all have access to clean water for hand hygiene.

Participants' discussions centered on clean water as a fundamental prerequisite for public health and a primary tool for infection prevention. They broadly supported proposals to prioritize prevention, ensure universal access to water, sanitation, and hygiene (WASH), and specifically fund water access in healthcare facilities. These issues were seen as interconnected, with universal access being a key component of a national prevention strategy, and safe healthcare facilities being a critical part of that infrastructure. The role of government in funding and implementing these measures was a central focus throughout the conversation.

Proposal: Prioritize infection prevention tools

Participants strongly supported prioritizing infection prevention tools, viewing clean water as the most critical component. Several argued that without it, other public health programs are rendered ineffective, with one stating, "if we still use unclean water, those programs from the government or the WHO about vaccination and anti-microbials are useless." This preventative approach was described as a cost-effective, "long-term investment" that would reduce the burden of infectious diseases and decrease mortality rates in both humans and animals. A key benefit identified by many was that preventing infections through clean water and vaccination would reduce the need for antibiotics.

While there was broad agreement on the importance of prevention, some participants raised concerns. The cost of purchasing and distributing supplies was noted as a potential barrier, along with the need to "educate the public on the correct usage." A few participants questioned the emphasis on vaccination, suggesting that good nutrition was a better path to health. Others pointed to systemic issues like corruption, arguing that the main problem is not a lack of investment but the "misuse of what is invested."

Proposal: Ensure universal access to WASH

There was overwhelming consensus that everyone should have access to clean water and safe sanitation, which participants frequently described as a "fundamental right" and a "basic human need.". Participants saw a direct link between a lack of clean water and the spread of diseases like cholera and typhoid, which in turn increases the use of antibiotics. One participant stated, "if people have access to clean water, there won't be any need for any sickness and they won't be made for antibiotics." The responsibility for ensuring this access was placed firmly on governments.

Discussions highlighted significant challenges to implementation. Many participants noted that access is severely lacking, especially in remote areas. Practical barriers included geographical difficulties in mountainous regions, high infrastructure costs, and widespread pollution of water sources from waste and industry. Some participants also pointed to a lack of political will and the need for public education on hygiene and conservation.

Proposal: Fund healthcare facilities for hand hygiene water

Participants supported specific government funding to ensure healthcare facilities have clean water for hand hygiene. They described hospitals as places with a high risk of infection transmission and stressed the importance of hygiene to protect patients, particularly vulnerable individuals like. One participant put it strikingly, "Imagine carrying a newborn baby with contaminated hands." Several participants reported that many hospitals, especially public or rural ones, currently lack basic amenities. One stated, "when you go to some hospitals, particularly general hospitals, most of them don't even have hand washers in their bathrooms." Another observed that hygiene practices have lapsed since the pandemic, noting that "it is now a matter of shaking hands and hugging. So they forgot about it like everything else."

Concerns about this proposal centered on implementation in under-resourced settings. Participants pointed out that rural clinics are often understaffed, and workers may not have "time to concentrate on hygiene." Securing adequate government support to improve infrastructure was also seen as a significant challenge. One participant suggested that programs focused only on facilities might not be effective without also engaging the broader community.

Participants' discussions centered on clean water as a fundamental prerequisite for public health and a primary tool for infection prevention. They broadly supported proposals to prioritize prevention, ensure universal access to water, sanitation, and hygiene (WASH), and specifically fund water access in healthcare facilities. These issues were seen as interconnected, with universal access being a key component of a national prevention strategy, and safe healthcare facilities being a critical part of that infrastructure. The role of government in funding and implementing these measures was a central focus throughout the conversation.

Proposal: Prioritize infection prevention tools

Participants strongly supported prioritizing infection prevention tools, viewing clean water as the most critical component. Several argued that without it, other public health programs are rendered ineffective, with one stating, "if we still use unclean water, those programs from the government or the WHO about vaccination and anti-microbials are useless." This preventative approach was described as a cost-effective, "long-term investment" that would reduce the burden of infectious diseases and decrease mortality rates in both humans and animals. A key benefit identified by many was that preventing infections through clean water and vaccination would reduce the need for antibiotics.

While there was broad agreement on the importance of prevention, some participants raised concerns. The cost of purchasing and distributing supplies was noted as a potential barrier, along with the need to "educate the public on the correct usage." A few participants questioned the emphasis on vaccination, suggesting that good nutrition was a better path to health. Others pointed to systemic issues like corruption, arguing that the main problem is not a lack of investment but the "misuse of what is invested."

Proposal: Ensure universal access to WASH

There was overwhelming consensus that everyone should have access to clean water and safe sanitation, which participants frequently described as a "fundamental right" and a "basic human need.". Participants saw a direct link between a lack of clean water and the spread of

diseases like cholera and typhoid, which in turn increases the use of antibiotics. One participant stated, "if people have access to clean water, there won't be any need for any sickness and they won't be made for antibiotics." The responsibility for ensuring this access was placed firmly on governments.

Discussions highlighted significant challenges to implementation. Many participants noted that access is severely lacking, especially in remote areas. Practical barriers included geographical difficulties in mountainous regions, high infrastructure costs, and widespread pollution of water sources from waste and industry. Some participants also pointed to a lack of political will and the need for public education on hygiene and conservation.

Proposal: Fund healthcare facilities for hand hygiene water

Participants supported specific government funding to ensure healthcare facilities have clean water for hand hygiene. They described hospitals as places with a high risk of infection transmission and stressed the importance of hygiene to protect patients, particularly vulnerable individuals like. One participant put it strikingly, "Imagine carrying a newborn baby with contaminated hands." Several participants reported that many hospitals, especially public or rural ones, currently lack basic amenities. One stated, "when you go to some hospitals, particularly general hospitals, most of them don't even have hand washers in their bathrooms." Another observed that hygiene practices have lapsed since the pandemic, noting that "it is now a matter of shaking hands and hugging. So they forgot about it like everything else."

Concerns about this proposal centered on implementation in under-resourced settings. Participants pointed out that rural clinics are often understaffed, and workers may not have "time to concentrate on hygiene." Securing adequate government support to improve infrastructure was also seen as a significant challenge. One participant suggested that programs focused only on facilities might not be effective without also engaging the broader community.

Concluding Synthesis:

The discussions on clean water revealed universal recognition of its foundational importance for public health and infection prevention. Participants viewed access to clean water, sanitation, and hygiene as both a basic human right and a practical necessity for reducing infectious disease burden and subsequent antibiotic use. The strongest support emerged for proposals that positioned water access as a preventative public health investment, with participants arguing that ensuring clean water would reduce the need for antibiotics in the first place. Support for targeted interventions in healthcare facilities was particularly strong, reflecting concerns about infection transmission in vulnerable settings. However, implementation concerns centered on the familiar challenges of cost, infrastructure requirements, political will, and the particular difficulties of reaching remote populations. Participants also emphasized that physical infrastructure alone would be insufficient without concurrent public education on hygiene practices and water conservation. The discussions reflected a clear understanding of the interconnectedness of water access, disease prevention,

and antimicrobial resistance, while simultaneously highlighting the enormous practical challenges of achieving universal WASH access in resource-constrained settings.

7. Immunizations

Proposals Discussed:

- **Proposal 1:** Immunization for WHO-recommended childhood vaccination should be scaled up towards universal/full coverage, to capture all children.
- **Proposal 2:** An adult programme of vaccination should be created by national governments to ensure vaccination of vulnerable populations for influenza and pneumonia.
- **Proposal 3:** Influenza vaccination should be incentivized for patient-facing healthcare workers.

Participants' discussions centered on the importance of immunization as a key preventative public health measure. They broadly supported expanding vaccination programs, viewing proposals for childhood, adult, and healthcare worker immunizations as interconnected strategies to reduce disease, protect vulnerable populations, and lessen the burden on healthcare systems. The primary considerations across all proposals were ensuring equitable access, addressing cost barriers, and the critical role of government in funding and public education.

Proposal: Scale up childhood vaccination

There was overwhelming support for scaling up childhood immunization to achieve universal coverage. Participants viewed it as a fundamental tool for public health, stating it has been "proven to significantly reduce morbidity and mortality caused by infectious diseases." The primary benefits cited were protecting children from illness, disability, and death, reducing child mortality rates, and building a strong immune foundation for the future. Many saw it as a crucial way to "reduce the need for antibiotics." Despite acknowledging that immunization is expensive, participants felt it was a worthwhile investment because "prevention is better than treating or recovering from something that has already happened."

However, several significant barriers were identified. The high cost of vaccines was a primary concern, with one participant noting it "discourages some people from getting their children immunized." Logistical challenges, such as ensuring equitable distribution across large and remote areas, were frequently mentioned. Participants also highlighted parental hesitancy, driven by fears of side effects and misinformation, which can "make parents worry about whether or not their child needs to be immunized." A few participants expressed personal skepticism, with one arguing it is better to "focus on improving nutrition and strengthening the children's own immune systems." To overcome these challenges, participants emphasized that government funding is necessary and that public education is needed to build trust and awareness.

Proposal: Create an adult vaccination program

Participants widely supported creating a national vaccination program for adults, particularly for vulnerable populations like the elderly. The main rationale was that immunity naturally declines with age, making additional vaccinations necessary. Many noted a lack of awareness among the public, stating that “most adults do not know that they are supposed to also undergo immunization.” An adult program was seen as a way to reduce infections, limit antibiotic use, and prevent adults from transmitting diseases to children. Some argued vaccination should be available to everyone, regardless of age, to “guarantee a better quality of life.”

Concerns about this proposal mirrored those for childhood vaccination, focusing on cost and implementation. The high price of vaccines like influenza was cited as a barrier, with one participant stating “there should be a subsidy for the influenza vaccine.” The potential strain on national budgets was also a concern. Some participants expressed skepticism about new adult vaccines, citing negative experiences with the COVID-19 vaccine, while another preferred a focus on “natural ways to go back to the lands.” Others pointed out that such programs already exist in their countries, and the real issue is not creation but ensuring “access for people in remote areas.”

Proposal: Incentivize healthcare worker flu vaccination

There was strong and widespread agreement on the need to vaccinate patient-facing healthcare workers (HCWs). Participants repeatedly described HCWs as being on the “front lines” and the “most vulnerable because they are constantly interacting with patients.” Vaccinating them was seen as essential for two primary reasons: to protect the HCWs themselves and to prevent them from transmitting infections to vulnerable patients. One participant asserted that HCWs “must be ‘pure’ first before we face patients.” The proposal was also supported as a way to prevent staff shortages due to illness and to ensure HCWs can serve as credible advocates for vaccination to the public.

While support was dominant, a few reservations were raised. One participant noted that some of their nurse colleagues “take them because they are obliged to keep their jobs, but they don’t like it,” expressing concern about vaccine hesitancy within the profession. Others questioned the proposal’s narrow focus, arguing that the influenza vaccine “does not address all pathogens” or that vaccination should be for everyone, not just HCWs. Several participants felt the measure should be mandatory rather than incentivized, framing it as a “matter of public health.”

Concluding Synthesis:

The discussions on immunization programs revealed overwhelming support for vaccination as a cornerstone of preventative public health strategy and a critical tool for reducing antibiotic dependence. Participants demonstrated sophisticated understanding of vaccination’s dual benefits: protecting individuals from disease while simultaneously reducing community-wide antimicrobial use. Support spanned childhood programs, adult vaccination initiatives, and targeted healthcare worker immunization, reflecting recognition that comprehensive vaccination coverage requires a life-course approach. However, this strong principled support

was consistently tempered by practical concerns about cost barriers, particularly for vulnerable populations, and logistical challenges in achieving equitable distribution across diverse geographical settings. Vaccine hesitancy emerged as a significant concern, with participants linking this to misinformation, distrust in government and healthcare systems, and negative experiences during the COVID-19 pandemic. The role of government funding was emphasized throughout, with participants arguing that vaccination should be treated as a public good rather than an individual expense. Participants also stressed the importance of public education and the use of trusted community messengers to build confidence in vaccination programs.

8. Farming

Proposals Discussed:

- **Proposal 1:** Farms should ensure good infection prevention and biosecurity.
- **Proposal 2:** Farming, including fish, should use vaccination.
- **Proposal 3:** Farm workers should be taught hand hygiene.

Participants' discussions centered on ensuring the safety of the food supply through improved farming practices. The conversation focused on two related approaches: implementing comprehensive biosecurity and infection prevention measures, and scaling up the use of animal vaccination. While both were seen as crucial for protecting public health, the discussion on vaccination was more extensive, delving into its benefits for animal welfare and farm productivity, as well as significant concerns about cost, implementation, and the need for government oversight.

Proposal: Ensure good infection prevention and biosecurity

Participants broadly supported ensuring good infection prevention and biosecurity on farms, viewing it as a fundamental step toward safeguarding public health. The primary rationale was to prevent the spread of zoonotic diseases from animals to humans through the food supply. One participant stated, "there's no point in getting vaccinated, taking precautions and taking care of ourselves if the food is coming contaminated, right?." Better biosecurity was also seen as a way to reduce the need for antibiotics. Specific measures mentioned included maintaining clean farm environments, proper waste management, using clean water sources, separating sick animals, and locating farms away from residential areas.

However, participants raised concerns about the feasibility of implementation. The high cost of biosecurity measures was seen as a significant barrier for farmers, particularly small-scale producers. This could lead farmers to "use cheaper methods" or make it difficult to inspect the many small farms that exist. To address these challenges, participants emphasized the need for farmer education and training, as well as government support through financing and strict, non-corrupt supervision to ensure compliance.

Proposal: Farming, including fish, should use vaccination

There was widespread support for scaling up the use of vaccination in farming and aquaculture. The most common reason cited was the protection of human health, as vaccination helps ensure that livestock products are “ensured to be safe and healthy for consumption by the public.” Participants frequently noted that vaccination prevents the transmission of diseases from animals to humans. Another key benefit identified was the reduction of antibiotic use; participants saw vaccination as a preventative tool that could lessen reliance on antibiotics and thereby help combat antimicrobial resistance. Vaccination was also seen as beneficial for farmers, as it improves animal health and survival, increases productivity, and “will reduce the loss of income for rural producers.”

Despite strong support, participants raised significant concerns and conditions. The most prominent issue was the high cost of vaccines, which could financially “increase the burden on the public” and lead to higher food prices. This led to widespread calls for government intervention, with many stating that funding “must still be borne by the government” or that the government should provide subsidies. Another major theme was the need for regulation and oversight to prevent misuse, such as using vaccines to “promote rapid growth” or administering them incorrectly. Participants called for clear standards, documentation, and supervision by professionals. The necessity of educating farmers on the importance and proper application of vaccines was also frequently mentioned. A few participants expressed reservations about vaccine safety, questioning potential side effects for animals and human consumers. A smaller number of participants opposed the proposal, arguing it could make food or livestock “artificial” or constitute a “double dose” for humans.

Concluding Synthesis:

The discussions on farming practices revealed strong support for improving biosecurity and vaccination in animal agriculture as essential strategies for protecting both animal and human health. Participants demonstrated clear understanding of the One Health concept, recognizing that animal health interventions reduce zoonotic disease transmission, decrease antibiotic use in agriculture, and ultimately protect the human food supply. The emphasis on prevention through vaccination and improved farm management practices reflected participants' broader preference for proactive rather than reactive approaches to disease control. However, implementation concerns were particularly acute in this domain, with participants highlighting the significant financial burden on farmers, especially small-scale producers who operate on thin margins. The accessibility and cost of veterinary services emerged as critical barriers, leading to suggestions for government subsidies, training programs for farmers, and alternative models using extension workers. Participants also emphasized the need for robust oversight and professional supervision to prevent misuse, reflecting concerns that profit motives might lead to inappropriate antibiotic practices.

9. Labeling Awareness

Proposals Discussed:

- **Proposal 1:** Antibiotics for human or animal use (or products containing them, such as animal feed) should be identified by an international standard, such as a hazard-warning symbol or label.

Participants' discussions centered on a proposal to label food produced with the routine use of antibiotics. The conversation highlighted a fundamental tension between the perceived importance of labeling for transparency and safety, and practical concerns regarding its implementation, cost, and effectiveness. A recurring and central theme was the view that any labeling initiative, to be successful, must be accompanied by robust public education and awareness campaigns.

Proposal: Label food with routine antibiotics

Participants widely supported the principle of labeling food and animal feed that involves the routine use of antibiotics. Many described labeling as important for providing transparency, enabling consumer choice, and ensuring safety. Supporters argued that consumers have a right to know what they are consuming and that clear labels would help prevent the misuse of antibiotics, reduce errors, and help differentiate between products for human and animal use. The idea of an international standard was seen as a way to build consumer trust, and combat counterfeit products.

Despite broad support for the concept, participants raised significant concerns about the proposal's feasibility and potential negative consequences. The most frequently cited issue was cost, with many stating that international standards are expensive and difficult to create and enforce. This expense, they argued, would increase food prices for consumers and be particularly "challenging for the small scale producers." Some suggested that national standards would be a more practical and less costly alternative.

The effectiveness of labels was also questioned. Several participants noted that many people do not read labels, prioritizing price over other factors. One participant compared it to warnings on unhealthy foods, stating, "[People] continue buying it so I don't know if it's as much the seal as the training of people." Others felt the proposal was superficial, arguing that a label "does not replace the prevention and correct use of an antibiotic" and that the focus should instead be on stricter controls at the farm level.

A dominant theme was the critical link between labeling and public awareness. Many participants asserted that labeling would be ineffective or even counterproductive without education. They warned that "if there is poor education, that can lead to misinterpretation," especially in regions with low literacy rates. To overcome this, it was repeatedly stated that "education is also needed to raise awareness that the labels provided are beneficial to the users." Suggestions included using simple symbols or pictures, providing information in local languages, and ensuring explanations are clear enough.

Concluding Synthesis:

The discussions on food labeling revealed broad support for transparency in antibiotic use in food production, with participants viewing consumer information as both a right and a tool for driving market-based change in agricultural practices. Labeling was seen as a mechanism to empower consumers, increase accountability among producers, and raise public awareness about antibiotic use in the food chain. However, this principled support was heavily qualified by concerns about implementation and effectiveness. Cost emerged as a central issue, with participants worrying that labeling requirements—especially international standards—would increase food prices and disproportionately burden small-scale producers and low-income consumers. The potential ineffectiveness of labels was another major concern, with participants noting that many consumers either do not read labels or lack the literacy and knowledge to interpret them meaningfully. This led to overwhelming consensus that labeling initiatives must be accompanied by comprehensive public education campaigns using simple symbols, local languages, and clear explanations. Participants also stressed the need for robust regulatory oversight to prevent fraudulent labeling and ensure label accuracy. The discussions reflected a sophisticated understanding that labeling alone cannot solve the problem of antibiotic misuse in agriculture—it must be part of a broader strategy that includes farm-level controls, professional oversight, and consumer education.

10. School Curriculum

Proposals Discussed:

- **Proposal 1:** Hand hygiene and infection prevention should be part of the standard curriculum in schools from the start of schooling through to graduation.
- **Proposal 2:** Awareness campaigns should focus on the risks and harms of taking unnecessary antibiotics on humans, food security, and the environment.

Participants' discussions centered on the roles of formal education and public awareness campaigns in promoting community health. The proposal to add hygiene to the school curriculum sparked debate about whether this was a school or parental responsibility, and whether it should be a formal subject or an ingrained habit. This connected to broad support for a public awareness campaign on antibiotic risks, which participants saw as a critical need due to widespread misuse and lack of knowledge.

Proposal: Add hygiene to school curriculum

There was widespread support for teaching hygiene in schools, with many participants emphasizing the importance of starting early to form lifelong habits. Proponents argued that schools are a crucial environment for this education, as children are receptive learners and can act as agents of change by bringing knowledge home to their families. One participant stated, "if you educate children you will have a future generation that is more aware, more careful and more organized." Many felt schools have a responsibility to teach hygiene, especially for

children who may not receive this education at home. The lessons of the COVID-19 pandemic were frequently cited as evidence of the need for ongoing hygiene education.

Conversely, a significant number of participants opposed making hygiene a formal curriculum subject. The primary concern was that hygiene is "a habit... not just a curriculum." These participants argued that making it a subject to be passed could lead to students forgetting the practices once the class is over. Others believed hygiene education is primarily the role of parents and the family, stating, "education comes from the family; the family has to teach people to brush their teeth, wash their hands." Some felt schools have more important academic priorities. Practical barriers were also raised, including the lack of resources like clean water and sinks in some schools, the need for teacher training, and the potential for parental attitudes to undermine school lessons. Some participants suggested a middle ground, advocating for hygiene to be instilled as a school-wide culture or habit rather than a formal, graded subject.

Proposal: Campaign on antibiotic risks

Participants overwhelmingly supported awareness campaigns focused on the risks of unnecessary antibiotic use. There was a strong consensus that the public lacks crucial information, leading to dangerous practices like self-medication, not finishing prescriptions, and using antibiotics for viral illnesses. One participant noted that people "will always use antibiotics for even minor ailments, even though they know it is dangerous." The primary driver for this support was the concern that misuse leads to antibiotic resistance, which participants identified as a serious threat.

Participants suggested that campaigns should be widespread, using various channels like social media, influencers, and grassroots efforts to reach diverse audiences, including the general public, farmers, and parents. The need for clear, accurate information was stressed, with one person stating campaigns should "inform them about what antibiotics are for... their proper use. And if they are used inappropriately, the risks that may occur." While support was strong, some concerns were raised. A few participants worried that campaigns focusing only on risks could create fear of necessary medicines, and others pointed to practical challenges such as the high cost of implementation and the potential for government mismanagement of funds.

Concluding Synthesis

The discussions on educational interventions revealed strong support for both formal hygiene education and public awareness campaigns about antibiotic risks, though with important distinctions in approach. For hygiene education, participants were divided between those who saw schools as crucial venues for building lifelong healthy habits and those who believed hygiene should be a practiced culture rather than a graded subject. Support for antibiotic awareness campaigns was more unified, driven by widespread concern about dangerous practices like self-medication and incomplete treatment courses. Participants emphasized the urgent need to combat misinformation and build public understanding of antimicrobial resistance as a serious health threat. Across both proposals, participants stressed the importance of starting education early, using diverse communication channels to reach

different populations, and ensuring messages are clear, accurate, and culturally appropriate. The role of trusted messengers—including influencers, community leaders, and healthcare workers—was emphasized as critical for campaign effectiveness. However, concerns about implementation costs, potential government mismanagement, and the challenge of behavior change even with good information tempered enthusiasm. The discussions reflected recognition that education and awareness are necessary but not sufficient conditions for changing health behaviors, and must be supported by accessible, affordable healthcare services.

11. Vaccine Awareness

Proposals Discussed:

- **Proposal 1:** National governments should increase funding for awareness campaigns into vaccine hesitancy and improving understanding about people's behaviours relating to vaccination.

Participants' discussions centered on the widespread need for government-funded awareness campaigns to combat vaccine hesitancy. They identified a significant lack of public understanding and trust, which they linked to the spread of misinformation, particularly during the COVID-19 pandemic. Participants argued that effective educational campaigns are essential for improving public health literacy, rebuilding confidence in vaccines and healthcare systems, and ultimately increasing vaccination rates to prevent the resurgence of infectious diseases.

Proposal: Fund vaccine hesitancy campaigns

There was broad support for national governments increasing funding for vaccine awareness campaigns. Participants saw this as a crucial government responsibility, arguing that "awareness is a very important issue" for public health. A primary driver for this support was the need to combat widespread misinformation, which participants noted had intensified since the COVID-19 pandemic. They described how "the spread of hoaxes about microchips and other misinformation" and "fake news" have fueled fear and distrust, leading to the re-emergence of eradicated diseases like polio and measles.

Many participants believed that "effective campaigns can foster trust in all these vaccines and Health Care system at large." This was seen as necessary to counter a "deep public distrust of the government itself" and skepticism about the motivations behind vaccination programs. Participants also highlighted a fundamental lack of public education, stating that "many people don't even have knowledge about vaccines that much." They argued campaigns are needed to explain that vaccines are a "preventive thing which will help, which will prevent the disease to happen" and can also "reduce the use of antibiotics in the long term."

To be effective, participants suggested campaigns must be tailored and use trusted messengers. They recommended involving "competent institutions and individuals," including "religious leaders, traditional rulers," community health workers, and influencers, as relying solely on the government "might be insufficient." Outreach should use a variety of channels, from social media and television to direct community engagement like seminars and

door-to-door visits. The content of these campaigns should be transparent, explaining potential side effects and providing “proven scientific results” to build confidence.

A minority of participants expressed reservations. Some were “pessimistic when it comes to the government,” fearing that increased funding would lead to corruption or become a “political investment.” To mitigate this, one person suggested a “monitoring team who are not going to be biased.” Others argued that funding should prioritize vaccine access over awareness, as it is “more about funding to get the vaccines to these countries than raising awareness.” A few participants also suggested that awareness campaigns alone are insufficient and that mandates may be necessary because some people only act when “forced.”

Concluding Synthesis

The discussions on vaccine awareness campaigns revealed recognition of a critical knowledge and trust gap that threatens public health gains. Participants identified vaccine hesitancy as a serious and growing problem, fueled by misinformation that intensified during the COVID-19 pandemic and has contributed to the resurgence of previously controlled diseases. Support for government-funded awareness campaigns was strong, reflecting the view that rebuilding public confidence in vaccines is an essential government responsibility and a prerequisite for effective immunization programs. Participants demonstrated sophisticated thinking about campaign design, emphasizing the need for tailored messaging, trusted messengers from within communities, diverse communication channels, and transparent information that acknowledges potential side effects while explaining benefits. The importance of scientific credibility and the involvement of healthcare professionals, religious leaders, and community figures was repeatedly stressed. However, deep distrust in government emerged as a significant concern, with participants worrying that campaigns might be undermined by corruption, politicization, or the perception of hidden agendas. This led to suggestions for independent oversight and involvement of credible non-governmental institutions. A minority argued that awareness alone would be insufficient and that mandates might be necessary, while others insisted that funding should prioritize vaccine access over awareness in contexts where supply is the primary barrier. These discussions reflected the challenging task of rebuilding institutional trust in an era of widespread misinformation and politicized public health.

Session 3

Session 3 addressed systemic and governance approaches to antimicrobial resistance, focusing on agricultural antibiotic use, global coordination mechanisms, and data infrastructure. Discussions examined how to reduce inappropriate antibiotic use in food production through regulation, professional oversight, and market-based interventions like labeling. Participants explored the potential of global targets to drive coordinated action, drawing parallels to international climate initiatives while questioning whether such frameworks could accommodate the diverse capacities and contexts of different nations. A major focus was placed on surveillance and data systems as essential infrastructure for

understanding and responding to resistance patterns. Participants recognized the value of comprehensive, integrated surveillance across human, animal, and environmental health sectors (One Health approach), while simultaneously raising concerns about the feasibility of implementing such systems in low-resource settings. Key tensions included the challenge of collecting reliable data in contexts with limited laboratory capacity and informal antibiotic markets, concerns about dependency on international funding, questions about data sovereignty and privacy, and the complexity of integrating diverse surveillance systems. Throughout these discussions, participants emphasized that even the most sophisticated policy frameworks and data systems would be ineffective without addressing fundamental issues of governance capacity, corruption, and resource constraints that plague many low- and middle-income countries.

12. Antibiotics in Foods

Proposals Discussed:

- **Proposal 1:** Governments should regulate farmers to establish infection prevention (biosecurity) programs on farms including vaccination, which should include an inspection program.
- **Proposal 2:** Group prevention therapy with antibiotics for sick animals should be under the management of a veterinarian or allied professional.
- **Proposal 3:** Governments should ban the use of antibiotics that are critically important for humans from food production systems.

Participants' discussions on antibiotics in food centered on the need for greater control over their use in agriculture to mitigate risks to human health, particularly antibiotic resistance. The conversation explored three interconnected approaches: preventing infections on farms to reduce the need for antibiotics, ensuring professional oversight when antibiotics are used, and banning certain critical drugs from the food system altogether. While there was broad agreement on the need for action, participants also highlighted significant practical challenges related to cost, accessibility of professional services, and the feasibility of government regulation.

Proposal: Regulate farm infection prevention

Participants widely supported government regulation of farms to establish infection prevention programs. The core idea was that "prevention is better than cure." Many saw measures like vaccination, biosecurity, and improved hygiene as crucial strategies to "reduce the need for antibiotics" and improve overall animal health. One participant noted that "biosecurity is a measure to prevent diseases from entering and spreading in livestock farms," which is especially important for large populations. Support for government involvement was strong, with many stating that regulation, monitoring, and inspection are necessary to ensure farmers follow best practices. However, some raised concerns about the feasibility and cost of such programs, particularly for small farmers. To address this, several participants suggested the government should provide support, such as subsidies or incentives. A few participants

expressed skepticism about government involvement, citing risks of corruption or the difficulty of enforcement.

Proposal: Require professional group therapy management

There was extensive support for placing the management of antibiotic therapy under the supervision of a veterinarian or allied professional. The primary rationale was that professionals have the "requisite knowledge required to treat such animals" and can ensure the "appropriate type and dosage." This was seen as a critical step to prevent overuse and misuse by farmers, some of whom "rely on information from fellow farmers" or lack sufficient education. As one participant stated, "if there is no supervision, there will likely be overuse." However, this proposal also drew significant and recurring concerns about practicality. Many participants pointed out that veterinary services are "capital intensive" and would "increase operational costs for such Farmers, especially in rural areas." The accessibility and availability of professionals was another major issue, with participants noting a "shortage of veterinarians" and the difficulty of reaching remote farms. Some suggested that to address these challenges, the government could subsidize costs or train farmers and extension workers as an alternative.

Proposal: Ban critical antibiotics in food production

Views on banning antibiotics that are critically important for humans were divided. Supporters of a ban argued it was essential for public health, primarily to "reduce the generation of bacteria resistant to medically important antibiotics" and prevent the transfer of resistance to humans. One participant stated that using the same antibiotics in animals and humans means "we can't cure ourselves because of this." Others worried about unknown health effects, noting, "we don't know if it will conflict with the antibiotics we consume." Conversely, many participants opposed a complete ban, arguing that antibiotics are necessary to treat sick animals. One asked, "if you stop the use of important antibiotics for this treatment, how is the animal going to get well?". These participants often favored regulation and professional oversight over prohibition, suggesting that "burning them entirely may not be the solution, but regulating the use." Another argued that "we have to like have a system whereby we actually make responsible use of antibiotics" rather than banning them.

Concluding Synthesis:

Across all proposals, several recurring themes emerged. Participants consistently emphasized the need for government action, whether through regulation, inspection, or farmer education, to control antibiotic use in food production. The importance of professional expertise, particularly from veterinarians, was a central point of agreement, though this was frequently tempered by practical concerns about the high cost and limited availability of these services, especially for small-scale farmers in rural areas. Consequently, many discussions highlighted the need for government support, such as subsidies and training programs, to make regulations feasible. Ultimately, the conversations reflected a tension between the desire to protect public health by reducing antibiotic use and the necessity of using these medicines to ensure animal welfare and food safety.

13. Global Targets

Proposals Discussed:

- **Proposal 1:** There should be global targets to address antibiotic resistance, just like global targets for climate.
- **Proposal 2:** There should be a global target to reduce human deaths from antibiotic resistance.
- **Proposal 3:** There should be a global target to stop the use of critical antibiotics to human medicine in the food chain.
- **Proposal 4:** There should be a global target to stop the use of antibiotics for growth promotion and infection prevention without veterinary advice.

Participants broadly supported establishing global targets to address antibiotic resistance, frequently comparing the approach to international climate change initiatives. Discussions centered on the value of such targets for creating standardized frameworks, raising awareness, and fostering international cooperation. However, this support was consistently balanced with significant concerns about implementation, particularly the financial costs, the feasibility of enforcement, and the potential for inequitable burdens on low- and middle-income countries.

Proposal: Set global resistance targets

There was widespread support for establishing global targets to address antibiotic resistance, with many participants viewing it as an essential step. Proponents argued that such targets would create a "clear international framework" that provides a structured approach to a problem that "knows no national borders." Several participants believed targets would foster accountability and encourage governments to be more prudent in policymaking. The potential for targets to raise public awareness was a frequently cited benefit, as one participant noted, "if there's a global target to combat antibiotic resistance, it must be implemented." Some compared the idea to other successful global goals, such as those for phasing out CFCs or addressing polio, suggesting a global initiative could effectively cascade down to national and local levels.

Despite this strong support, many participants raised significant concerns about the feasibility and fairness of implementing global targets. The most common issue was the financial burden, which participants described as a "large investment." This led to a recurring concern that "low- or middle-income countries may be excluded due to financial constraints." Some participants argued that global targets "might be challenging because of the different economic standard of the country." This skepticism was sometimes rooted in the perceived failure of other global initiatives, with one participant stating, "global goals don't work" because smaller nations have trouble adapting to global goals. Others suggested that national or local targets would be more effective. To overcome these challenges, participants suggested that developed countries should provide significant financial contributions and that international bodies like the WHO should help subsidize implementation. Several also emphasized that targets must be adaptable to local contexts and preceded by public awareness campaigns.

Proposal: Reduce human deaths from resistance

Participants expressed strong and consistent support for a global target to reduce human deaths from antibiotic resistance. This was often seen as the primary motivation for tackling the issue, with participants stating it is "crucial to reduce human deaths" and a necessary step to combat a major "public health threat." Several participants believed such a target would raise awareness among patients about the dangers of antibiotic overuse and encourage collaboration across countries and sectors. One participant argued that addressing mortality should be the main focus, as success in this area would help resolve other related issues. However, a few participants noted practical challenges, including the lack of financial resources in some countries to implement such a plan and the need for better national data on resistance-related deaths before a target could be effective. Another suggested focusing on more easily monitored intermediate targets, such as "improved antibiotic stewardship or infection control measures."

Proposal: Stop critical antibiotics in food

There was general agreement on the need for a global target to stop the use of medically critical antibiotics in the food chain. Participants supported this proposal because it would "significantly reduce the risk of antibiotic resistant infections in humans" and improve public health. One participant noted that international organizations should take the lead to "ensure the restrict the use of antibiotics in the food chain." While the principle was widely supported, one participant cautioned that the "coordination and compliance of such systems to be implemented is really quite challenging."

Proposal: Stop antibiotic growth promotion

Participants generally supported a global target to stop using antibiotics for growth promotion and routine prevention without veterinary advice. Many felt this was an improper use of medicine, with one stating it "has nothing to do with the objective of an antibiotic." The risk to human health was a key concern, as participants noted that consuming treated animal products can cause "hormonal disorders" and other harm. However, some participants opposed this target, arguing it was not feasible because antibiotics are essential for current production levels and a ban would "increase" the price of meat for consumers. A few others questioned the premise of the proposal itself, expressing doubt that antibiotics are used for growth, with one stating, "I think there is a mistake in these proposals." Some participants also disagreed with a complete stop, suggesting that what is needed is not a ban but "better control" and supervision.

Concluding Synthesis:

The discussions on global targets for antimicrobial resistance revealed strong support for the principle of coordinated international action, frequently compared to successful global initiatives on climate change and disease eradication. Participants recognized that antimicrobial resistance transcends national borders and requires standardized frameworks, shared accountability, and international cooperation. Global targets were seen as valuable for raising awareness, creating political commitment, and providing clear benchmarks for progress. Support was particularly strong for targets focused on reducing human deaths and

restricting critical antibiotics in food production. However, this principled support was heavily qualified by concerns about equity and feasibility. The financial burden emerged as a central concern, with participants worrying that low- and middle-income countries would be unable to meet targets without substantial international support, potentially creating a system that exacerbates global health inequalities. Skepticism about enforcement mechanisms and the adaptability of global standards to diverse local contexts was pronounced. Some participants questioned whether global initiatives could succeed given the failure of other international goals and the vast differences in national health systems and economic capacities. The proposal to stop antibiotic growth promotion revealed the most division, with participants split between those who saw this as misuse of medicine and those who argued it was economically necessary. Throughout these discussions, participants emphasized that any global framework must be accompanied by financial support from wealthy nations, flexibility for local adaptation, and attention to the practical realities of implementation in resource-constrained settings.

14. Surveillance and Data Reporting

Proposals Discussed:

- **Proposal 1:** National surveillance programs should be in place to monitor - infection rates, bacterial types, antibiotic sales and use, and antibiotic resistance – in humans, animals (including fish) and water systems.
- **Proposal 2:** International funding support should be available for surveillance in countries willing to invest in laboratory capacity, monitoring, and reporting and where systems are not yet available.
- **Proposal 3:** Surveillance data should be reported nationally, regionally, and to the World Health Organisation, Food and Agriculture Organisation, and the World Organisation for Animal Health.

Participants' discussions centered on the necessity and feasibility of establishing comprehensive surveillance and data reporting systems for antibiotic resistance. They broadly supported the creation of national surveillance programs as a foundational step. This led to interconnected discussions about the need for international funding to build capacity, particularly in lower-income countries, and the subsequent importance of reporting the collected data internationally. However, significant concerns were raised regarding the practical implementation of these proposals, especially the potential for corruption with international funds and the infrastructural challenges in many nations.

Proposal: Establish national One Health surveillance

There was widespread agreement on the need for national surveillance programs that monitor antibiotic use and resistance in humans, animals, and water systems. Participants described this as a "crucial step" and "one of the most important fundamental parts" of addressing the issue. The primary rationale was that data is essential for effective action; as one participant stated, "any program you are doing without data reporting, you are unable to know the level, the quantity of what is happening." Such programs were seen as vital for tracking resistance,

enabling early detection, informing policy, and providing a “holistic view of the resistance levels.” Another participant noted that establishing a national program is a prerequisite, arguing that only when it is in place “we should be talking about even the second and the third proposals.”

Despite this strong support, participants raised significant practical challenges to implementation. A frequently cited obstacle was the lack of capacity in many countries, particularly regarding “infrastructure and human resources.” The difficulty of data collection in remote and rural areas was a specific concern, with one person noting it “is going to involve a whole lot of money and then time because there are some rural areas are not accessible.” Others viewed the task as nearly impossible in their national contexts due to factors like informal antibiotic sales or the sheer scale of the population. Some also expressed concerns about data security, stating, “we know our government has been very lax with data and data once is compromised cannot be retained.”

Proposal: Fund international surveillance capacity

The proposal to provide international funding for surveillance capacity in lower-income countries was met with divided opinions. Supporters argued it is essential, as many nations lack financial resources to build laboratories and monitoring systems on their own. This support was framed as a matter of global health security, since “a country that has resistance to antibiotics will not stay there; the diseases will spread to all other countries.” Several participants felt wealthier nations have an “obligation” to assist.

However, this proposal also drew significant skepticism and opposition. The most prominent concern was the “potential for mismanagement of funds” and corruption, which one participant described as “guaranteed in India.” Another major issue was the risk of creating dependency, which could “hinder local innovation and investment” and lead to unsustainable programs that stop when funding ends. Some participants also warned of exploitative agreements, with one noting that aid can “come with very, very, what do they call it, thief agreements.” A few argued that countries should instead prioritize becoming “self sufficient.”

Reflecting these concerns, many participants offered conditional support, emphasizing that funding must be tied to strict oversight. They called for a “proper monitoring of the usage of the funds” and suggested that international bodies should “set up to manage a third party body to manage the funds” to ensure accountability.

Proposal: Report surveillance data internationally

Participants generally supported reporting surveillance data to international bodies like the WHO, viewing it as a critical component of a global response. The primary justification was the transnational nature of antibiotic resistance, as it “crosses national borders.” International reporting was seen as a way to facilitate “global collaboration,” enable “international comparisons and trend analysis,” and create “early warning systems.” One participant stressed the importance of sharing data with experts, stating it must “be shared with the right personnel...for them to work on the solutions.”

Concerns about this proposal were both practical and principled. A key prerequisite mentioned was the need for strong national data collection systems first, as one cannot “create an accurate report” if the underlying data is weak. Practical hurdles included the high cost of implementation and infrastructural gaps like poor internet access in rural areas. More

fundamental objections were also raised, with one participant opposing international reporting as a “breach of data and privacy” that could be exploited by world powers to “develop bioweapons.” Others expressed skepticism that powerful countries would take responsibility, believing they would view the issue as “our problem, right? Not a global problem.”

Concluding Synthesis

The discussions on surveillance and data reporting revealed universal recognition that effective action against antimicrobial resistance requires robust data collection and sharing systems. Participants viewed national One Health surveillance programs as foundational infrastructure—essential for understanding the scope of the problem, tracking trends, enabling early detection, and informing evidence-based policy. The logic of international reporting was also widely accepted, given the transnational nature of resistance and the need for global coordination. However, this strong support for surveillance principles confronted formidable implementation barriers. Capacity constraints emerged as a critical concern, with participants noting severe limitations in infrastructure, laboratory facilities, and human resources, particularly in rural and remote areas. The difficulty of data collection in contexts with widespread informal antibiotic sales was acknowledged as a fundamental challenge. Corruption and data security concerns were repeatedly raised, reflecting deep distrust in government capacity to manage sensitive information responsibly. While many saw it as necessary for building capacity in resource-poor countries, others feared it would fuel corruption, create unsustainable dependency, and come with exploitative conditions. The discussions illustrated a profound gap between the technical requirements of effective surveillance and the practical realities of governance, infrastructure, and resources in many low- and middle-income countries. Participants emphasized that surveillance systems must be preceded or accompanied by investments in basic health infrastructure, trained personnel, and strong accountability mechanisms to function effectively and equitably.

15. Data Integration

Proposals Discussed

- **Proposal 1:** Laboratory systems for measuring antibiotic resistance in bacteria for humans and animals should be integrated with shared One Health resources.
- **Proposal 2:** Data from point of care rapid diagnostic tests should be incorporated into routine national surveillance reporting.

Participants’ discussions centered on two proposals for data integration to combat antibiotic resistance. The first involved integrating human and animal health laboratory systems, while the second focused on incorporating point-of-care (POC) diagnostic data into national surveillance. Participants broadly supported the principle of data integration, viewing it as a way to create more holistic and effective interventions. However, they also raised significant concerns about the practical challenges of implementation, including costs, infrastructure, and the need to maintain data quality and specialized expertise.

Proposal: Integrate human and animal resistance labs

There was widespread support for integrating laboratory systems for human and animal antibiotic resistance, often framed as a “holistic approach” to a problem that spans sectors. Proponents argued that since human, animal, and environmental health are interconnected, a unified system would enable better surveillance, facilitate more effective interventions, and help policymakers create better-informed policies. Several participants noted that sharing facilities and expertise would greatly improve efficiency, reduce redundancy, and ultimately save costs, which was seen as especially important for low- and middle-income countries. The creation of a single data source was seen as a way to make information more accessible and useful for all stakeholders.

However, a significant number of participants expressed reservations. Some argued that human and animal health systems are fundamentally different and should remain separate to maintain expertise, stating that “human doctors and veterinary doctors are not the same.” Others raised practical and logistical challenges, describing the proposal as “very complicated” and perhaps unrealistic in countries with limited infrastructure. Concerns were also raised about potential conflicts in the allocation of resources and the need for robust governance to ensure data integrity and confidentiality.

Proposal: Incorporate point of care data into surveillance

Participants generally favored incorporating data from point-of-care (POC) rapid diagnostic tests into national surveillance, primarily because it would improve the speed and timeliness of public health responses. The ability to get “immediate results” was seen as critical for early detection and for patients who need urgent treatment. This approach, they argued, would provide “real time insights into disease trends and outbreaks, especially in remote or underserved areas” where laboratory access is limited. The resulting data would create a “more comprehensive picture of disease prevalence” and help governments make better-informed decisions.

Despite the support, participants identified several significant barriers. The accuracy and reliability of rapid tests were a major point of concern, with some worrying that the tests could lead to misdiagnosis or “erroneous data.” The high cost of implementation was another frequently cited obstacle, including the need for infrastructure investment. Logistical issues, such as the difficulty of reaching remote populations and the need for trained personnel, were also highlighted.

Concluding Synthesis

The discussions on data integration revealed support for more holistic and coordinated approaches to surveillance and diagnosis, reflecting understanding of antimicrobial resistance as a cross-sectoral problem requiring integrated solutions. Participants recognized potential benefits of integrating human and animal health laboratory systems, including improved efficiency, reduced redundancy, better-informed policymaking, and cost savings through shared resources. The incorporation of point-of-care diagnostic data into national surveillance was valued for its potential to provide real-time information, particularly from underserved areas where laboratory access is limited. However, significant reservations tempered this support. For laboratory integration, concerns centered on the fundamental differences between human

and animal health systems and the risk of losing specialized expertise if systems were merged. Participants questioned whether integration would actually save costs or create new administrative burdens, and worried about data confidentiality and resource allocation conflicts. For POC data integration, the reliability and accuracy of rapid tests emerged as major concerns, with participants fearing that incorporating potentially erroneous data could undermine surveillance quality. Implementation costs, infrastructure requirements, and the need for trained personnel were cited as substantial barriers for both proposals. The discussions revealed concerns with the conceptual appeal of comprehensive data systems and practical concerns about complexity, feasibility, and the risk of compromising data quality or specialized expertise. Participants emphasized that any integration efforts must maintain high standards for data accuracy, respect the distinct needs of different health sectors, and be supported by adequate resources and governance structures.

16. Death Certification Notification

Proposals Discussed:

- **Proposal 1:** Antibiotic resistance should be included as a cause of death on all national death certificates to enable collection of data on mortality.

Participants' discussions centered on the proposal to add antibiotic resistance to death certificates, weighing the significant benefits of data collection against the practical challenges of implementation. The primary focus was on how standardized data could enhance public awareness, inform policy, and improve global health coordination. However, concerns about diagnostic capacity, accuracy, and the cost of implementation were consistently raised as major obstacles.

Proposal: Add antibiotic resistance to death certificates

There was widespread support for including antibiotic resistance as a cause of death on national death certificates. The most frequently cited reason was the critical need for data collection. Participants argued that this proposal would be "the only way to make statistics that really show that this exists." This data was seen as essential for understanding the scale of the problem, with one participant noting that underreporting "[masks] the true scale of [the] AMR crisis."

Many also viewed the proposal as a powerful tool for public awareness and education. They believed it could "increase people's awareness to be more careful about the use of antibiotics." The idea was also extended to animal health, where certification could help track antibiotic use in farming and "know the cause of death of that particular animal."

Despite the broad support, significant concerns were raised about the feasibility of implementation. A recurring issue was that accurately recording such deaths laboratory capabilities which participants felt were lacking, especially in rural areas, with one participant stating, "I agree this proposal is a non-starter because in rural areas how will there be laboratories which will ascertain..." The process was described as potentially "long and rather expensive." Some worried that doctors might not be adequately trained or that the system

could be prone to underreporting and misattribution, similar to what was seen with COVID-19 deaths. A few participants opposed the idea, arguing that not all deaths are caused by resistance or that it could “cancel out the disease that the person had.” Other concerns included family privacy and the potential for data manipulation.

Concluding Synthesis

The discussions on adding antibiotic resistance to death certificates revealed strong support for the principle of comprehensive data collection to understand and address the true burden of antimicrobial resistance. Participants recognized that current systems likely undercount resistance-related deaths, making it impossible to grasp the full scale of the crisis or mobilize appropriate resources. Death certification was seen as a crucial mechanism for generating reliable statistics, informing policy, and raising public awareness about the severity of antimicrobial resistance. The potential extension to animal health was also noted as valuable for tracking agricultural antibiotic use impacts. However, implementation concerns were substantial and centered primarily on diagnostic capacity. Participants questioned whether healthcare systems, particularly in rural areas, possess the laboratory capabilities necessary to accurately attribute deaths to antimicrobial resistance. The complexity and cost of the diagnostic process required was seen as a major barrier. Concerns about underreporting, misattribution, and the potential for doctors to lack adequate training or motivation to complete certificates accurately reflected broader distrust in system capacity. Some participants raised fundamental questions about the proposal's logic, arguing that resistance contributes to but rarely solely causes death, making attribution complicated. Privacy concerns and the potential for data manipulation were also mentioned. The discussions illustrated a familiar pattern: strong support for evidence-based approaches in principle, undermined by profound skepticism about whether existing systems possess the capacity, resources, and integrity necessary for effective implementation.

17. Food Labeling and Supply

Proposals Discussed

- **Proposal 1:** An identifying label should accompany food that is produced without the use of routine antibiotics.
- **Proposal 2:** Large-scale food suppliers – supermarkets, restaurant chains, intensive farming etc., – should be incentivized to promote the use of food produced without routine antibiotics.
- **Proposal 3:** Large-scale food suppliers – supermarkets, restaurant chains, intensive farming etc., – should be regulated to promote the use of food produced without routine antibiotics.

Participants' discussions centered on enhancing food safety and consumer knowledge regarding antibiotic use in the food supply. The primary focus was on a proposal to label food produced without routine antibiotics, which received widespread support as a means to

empower consumers. A related proposal to incentivize and regulate large-scale suppliers was viewed as a mechanism to support and enforce this goal, though it prompted more debate about its implementation and target.

Proposal: Label antibiotic-free food

There was overwhelming agreement on the need for an identifying label for food produced without routine antibiotics. Participants saw this as a fundamental right, enabling them to “know what we are consuming” and make informed choices. The primary benefit cited was improved public health and safety, as labels would help consumers “choose safe food that meets their needs” and avoid potential allergens or sensitivities. Many felt that clear labeling would increase transparency, build consumer trust, and hold producers accountable. Some also noted that labeling serves an educational purpose, raising awareness about food production practices.

Despite the broad support, several significant concerns were raised. The most frequent issue was the potential for increased costs, which participants feared would be passed on to consumers. This raised equity concerns, as higher prices could harm low-income people and place a heavy burden on small-scale farmers. The effectiveness of labeling was also questioned, with some participants pointing out that many consumers “don’t understand or have a poor understanding of the labeling” due to illiteracy or the use of technical language. Consequently, many argued that labeling must be accompanied by public education campaigns. Finally, participants stressed the need for strong regulation and oversight to ensure labels are truthful and to prevent fraud, as some worried that “labels can actually be forged.”

Proposal: Incentivize and regulate suppliers

Discussion on incentivizing and regulating large-scale suppliers to promote antibiotic-free food was more divided. Supporters viewed this as a necessary step to “encourage them to bring top quality food” and drive systemic change in the food industry. Regulation was seen as essential for enforcement, with one participant stating that from the “start of the production to the distribution level, I feel like there should be regulation.” Others suggested incentives could help smaller producers manage the increased costs associated with antibiotic-free production.

However, many participants expressed skepticism or opposition. A common view was that incentives were misdirected, arguing that large supermarkets are already profitable and that financial support should go to “farmers who actually need it.” Some felt incentives were unnecessary, believing that public awareness campaigns would be more effective at driving change. Others raised concerns that financial incentives are “vulnerable to exploitation by unscrupulous individuals” or that strict laws would be better than incentives.

Concluding Synthesis

The discussions on food labeling and supplier regulation revealed overwhelming support for transparency in antibiotic use in food production, framed as a consumer right and a tool for market-driven behavior change. Participants viewed labeling of antibiotic-free food as essential for informed choice, public health protection, and producer accountability. The educational function of labels was also emphasized as a way to raise broader awareness about food production practices. However, this strong principled support was accompanied by significant

concerns about equity and effectiveness. Cost impacts dominated the discussion, with participants worried that labeling requirements would increase food prices and disproportionately harm low-income consumers and small-scale producers. This raised questions about whether labeling would create a two-tier food system where only wealthy consumers could afford safer products. The effectiveness of labels was also questioned, particularly in contexts with low literacy or limited consumer understanding of technical terminology, leading to emphatic calls for accompanying public education. The need for robust regulatory oversight to prevent fraudulent labeling was stressed repeatedly. Discussion of incentivizing large-scale suppliers revealed more division, with many arguing that support should target farmers rather than profitable retailers, while others saw supplier regulation as necessary for systemic change. Some participants preferred strict regulation over incentives, viewing the latter as potentially exploitable or misdirected. Participants generally favored a combined approach that includes labeling, education, financial support for producers, and strong enforcement mechanisms.

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