Health Service Delivery

0 - Patient
1 - Primary
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3 - State / National
4 - Regional
5 - Global

Issue	Description	0	1	2	3	4	5	Links
Integration of traditional and complementary medicine	Many countries in the Global South practise local traditional medicine, which serve populations in a variety of beneficial ways. Integration refers to how to provide a more holistic approach to care and improve health outcomes for underserved populations that bring together the best of both.							1 2 3 4 5
AI assisted self diagnosis and peer diagnosis	AI assisted self diagnosis refers to people using AI to diagnose themselves and peers, even though such approaches can be unreliable or fraught without proper expertise.							1 2 3
mHealth (mobile) services	mHealth leverages mobile devices like smartphones to deliver healthcare services using remote consultations and monitoring of chronic conditions to health education, and medication adherence support.							1 2 3 4 5
Growing strategic involvement of women in health services	There is a long-term trend in the growth of women in health services beyond their social role as caregivers. However the strategic dimension of this is finally beginning to be acknowledged and leveraged, for example women's strategic role in family education and reproductive health, among many other areas.							1 2 3 4
Print on demand and remote production of medical parts using 3d printing	Print on demand and remote production refers to The manufacturing of medical equipment and devices using new technologies such as 3D printers, CNC machines and digital moulding. These technologies allow for distributed manufacturing capability that can produce equipment in hard to reach places, and are already being used for disaster responses.							1 2

“Health in a box” containerisation	“Health in a box” containerisation refers to bringing all the features of a small clinic in a container or similar portable module - useful in disaster situations to quickly set up capacity, and as a quick remote set up option.							1
Decentralisation and community-based care	Decentralisation and community-based care refers to decentralising health services and empowering communities to take ownership of their health. Community-based care models involve local health workers, community engagement, and culturally appropriate interventions that improve access and responsiveness to local needs.							1 2 3 4
Pressure to reduce the carbon emissions of health services	Government services around the world are being driven to develop lower carbon footprints, which include hospitals and other health systems that are intensive energy users.							1 2 3
Use of digital twins for service modelling and simulation	A digital twin is a virtual model of a real-world object, process, or system, a digital representation that mirrors its physical counterpart throughout its lifecycle. In the area of health services it has the potential to help optimise resource allocation and infrastructure planning, improved disease surveillance and outbreak response, personalise medicine and treatment, training and education for healthcare workers, enhanced patient engagement and education, and address social determinants of health (SDOH) Through types of population modelling.							1 2
Legal and illegal immigration reshaping health services	The movement of populations across borders, especially in the context of climate impacts and climate migration, will put new demands and pressures on health services, and create questions and challenges for supporting and caring for people without legal standing and citizenship.							1 2 3
Growing shortage of healthcare workforce	The growing shortage of healthcare workforce, particularly in rural and remote areas, is being exacerbated by aversion to rural / remote work, brain drain (both internationally and into private sector opportunities) and limited training opportunities.							1 2 3 4
Increasing reliance on resilient health systems	Increasing reliance on resilient health systems refers to the increasing vulnerability of health systems to climate change, natural disasters, and pandemics, especially in the context of 21st century “grand challenges”.							1 2
Social Determinants of Health as a paradigm shift	There is a growing importance of integrating SDOH factors into health service delivery models and collaborating with other sectors like education and social welfare, with the increasing awareness of the systemic dimension of health outcomes.							1 2 3
Increasing health tourism	Health tourism, often from the Global North to various Global South countries, can distort various dimensions of the health system for locals, especially the private sector, but may create other benefits.							1 2 3 4

Digital health disruption	This describes the advancement of digital health technologies, including telemedicine, mobile health (mHealth), and artificial intelligence (AI), which interconnect and will disrupt the health sector.							1 2 3 4 5 6

Health Workforce

0 - Patient
1 - Primary
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3 - State / National
4 - Regional
5 - Global

Issue	Description	0	1	2	3	4	5	Links
Rise of community health worker models	The rise of community health worker models is in part a response to the shortage of healthcare professionals in these regions and the need to provide accessible and culturally relevant healthcare. Community health workers, often from the communities they serve, are trained to provide basic healthcare services, health education, and link their communities to formal healthcare systems. While this approach is common in the Global South health discourse, on the ground its implementation seems uneven, however growing.							1 2 3 4 5
AI assisted workforce / AI deskilling	AI assisted workforce / AI deskilling highlights the opportunities and risks of AI in supporting the health care workforce. Can AI reduce costs and help workers to deliver more with less? Or will this come at the cost of reliability and quality?							1 2 3 4
Feminisation of health care workforce	Feminization of the health care workforce describes the growing presence of women in various healthcare roles as doctors, nurses, and community health workers, and efforts to reduce gender disparities, addressing gender biases and promoting equal opportunities for women in healthcare. Women often face gender-based discrimination, unequal pay, and limited career advancement opportunities in the sector as well.							1 2 3 4
New "unusual" players	New "unusual" players described non traditional providers providing healthcare services, for example technology companies (leveraging analytics), telecommunication providers (mHealth services), retailers and pharmacies (health screenings, vaccinations, and chronic disease management services), genetic profiling and risk assessment services, microfinance institutions							1 2 3 4

	(providing loan programs, health education, insurance, and access to discounted healthcare services to their clients), and social enterprises in healthcare innovation, creating affordable medical devices, diagnostics, and treatment solutions designed for low-resource settings.							
Task-Shifting	Task-Shifting describes where specific tasks are delegated to lower-level cadres of health workers or community health volunteers.							1 2 3 4
AI driven job loss disruption	Different from deskilling, AI job loss / work disruption from AI implementation describes the potential for artificial intelligence services to fully eliminate certain health services jobs.							1 2 3
Workforce mental health	Workforce mental health describes the increasing psychological pressures put on health professionals and people working in health systems and the increasing emphasis on healthcare professionals mental health / wellbeing and risk of burnout.							1 2 3 4 5
Technological disruption and training education	Technological disruption and training education describes how new technology will require new skills and competencies from the workforce, digital health training programs and workforce development strategies.							1 2 3 4
Gig economy healthcare precarisation	“Gig economy” healthcare system precarisation / “Uberisation” of health care describes how salaried jobs are becoming less common with more freelance or volunteer jobs. This loss of salary and full-time jobs is accompanied by more part-time jobs with less job security and less entitlements which have an impact on health services.							1 2 3
Strategic responses to climate changes	Strategic and medium- and long-term responses of health professionals to climate change describes how health professionals are upskilling and bootstrapping social enterprises to address climate change impacts in the health sector. Asks questions about the professionalisation of climate health.							1 2 3 4 5

Health Information Systems

0 - Patient
1 - Primary
2 - Secondary
3 - State / National
4 - Regional
5 - Global

Issue	Description	0	1	2	3	4	5	Links
Remote monitoring and care of patients	Remote monitoring and care of patients describes the use of new technologies to track patient health. Common are already wearable devices and sensors such as smartwatches, fitness trackers, and biosensors, which are increasingly being used in telehealth platforms to support virtual consultations, remote diagnosis, and prescription refills. Remote monitoring and care will conceivably integrate with mHealth applications. More robust IoT possibilities will be integrated systems for Remote Patient Monitoring (RPM), that bring together data from various sources, including wearable devices, home monitoring equipment, and electronic health records. AI and Machine will also factor in, as monitored data will be used for AI based analysis of patient data to identify patterns, predict disease risk, and recommend personalised treatment options.							1 2 3 4 5 6
Community Engagement and Ownership	This describes the engagement of communities in the design, implementation and evaluation of HIS systems being implemented, that can ensure that systems are culturally relevant, address local needs, and build trust between healthcare providers and patients.							1 2 3 4 5
mHealth / telehealth systems capacity	This describes an expanded / expanding healthcare capacity that enables remote delivery of services through mobile devices and digital platforms. This will increasingly allow healthcare providers to reach more patients, particularly in underserved areas, while offering convenient access to consultations, diagnostics, treatment, and health education.							1 2 3 4 5

Enhanced diagnostics	Enhanced diagnostics describes the overall enhancement of diagnosis capability through digital technologies. These include: the use of AI in image analysis, risk prediction, decision support (AI-powered clinical decision support tools); the use of genomic data integration that can personalised medicine and allow tailored treatment based on genetics; more futuristically, pharmacogenomics (use of genomic data to optimise drug therapies); use of big data analytics of populations to identify patterns that can inform clinical practice guidelines, public health interventions, and resource allocation; and the use of comparative effectiveness research (to compare the effectiveness of different treatments and interventions).							1 2 3 4 5
Balancing digital and traditional systems	This describes finding the right balance between implementing digital innovations in HIS and the use of existing paper-based or traditional systems. In resource-constrained settings, health systems will need to continue to use traditional non-digital systems that still serve populations, while integrating digital innovations that can improve outcomes. This is less an emerging issue than a critical issue in how health systems navigate digital transformation.							1 2 3 4 5
Smart health facilities	IoT sensors and wearables can create environments that monitor both people and environments, can optimise energy usage, monitor equipment performance, and improve overall efficiency of healthcare facilities.							1 2 3 4 5
Data equity and accessibility	This describes the growing concern about equitable access and use of data. Disparities in internet connectivity, digital literacy, and infrastructure create barriers for marginalised communities, and missing or incorrect data leads to poor fit AI models.							1 2 3 4 5
AI-assisted epidemiology	AI-assisted epidemiology focuses on population health and disease patterns to predict, monitor, and control the spread of diseases within communities and populations. Using predictive modelling, AI algorithms can increasingly analyse large-scale health data and predict disease outbreaks, transmission patterns, and potential hotspots. These can ack as early warning systems to identify early signs of disease outbreaks. This can also support risk assessment of population-level risk factors for various diseases, informing targeted prevention strategies and informing policy making. AI assisted surveillance systems can monitor disease trends and patterns to inform public health decision-making, support rapid responses and policy development.							1 2 3 4
Sustainability and capacity building	Sustainability and capacity building describes the challenge and issue of top heavy HIS and their reliance on external funding and technical assistance. It questions the extent to							1 2 3 4 5

	which developing countries can sustain the use of certain top heavy HIS, and the extent to which local (or regional / South-South) capacity building in HIS development, implementation, and maintenance can play a role in their long term sustainability.							
AI and ethics	AI and ethics describes the issue of AI in HIS and the ethical concerns regarding bias, transparency, control, ownership of data and accountability. If AI's are run, located (servers) or operated outside of the country where they are being used for patient support, who controls the data, how does it remain secure, what happens to the data and who eventually benefits?							1 2 3 4 5
Inadequate infrastructure and resources	Inadequate infrastructure and resources describes the challenge that many developing countries face with poorly resourced and inadequate information management systems. This is somewhat different from sustainability and capacity building of top heavy HIS (above) in that some counties simply don't have enough baseline infrastructure and resources to begin with.							1 2 3 4 5
Block chain for supply chain management	Block chain for supply chain management describes the potential for blockchain technology to play a role in the optimization of supply chains, their potential to enhance transparency, efficiency, and data security. It's acknowledged that blockchain is still an emerging issue and has not been fundamentally proven, however it does offer potential.							1 2 3 4
Proprietary health data crisis	Proprietary health data crisis describes the issue and challenge of how Big Tech (large technology companies) may use and trade in our health data. We live in “data entanglements” where the consumer use of tech platforms of all varieties compromise security, ownership and privacy. Big Tech was built on the use of consumer data and the question is whether this will extend to consumer health data, undermining a person's autonomy and ownership of their own health data, but which also has the potential to hamstring efforts by governments to control population health data for their own analysis and decision making.							1 2 3 4 5

Access to Essential Medicines

0 - Patient
1 - Primary
2 - Secondary
3 - State / National
4 - Regional
5 - Global

Issue	Description	0	1	2	3	4	5	References
Biohacking	Biohacking refers to the practice of using science and technology to optimise one's biology and physiology, often outside of traditional medical settings. This can involve self-experimentation with diet, supplements, exercise, sleep patterns, drugs, surgery and even implanted devices. represents a complex and evolving phenomenon with both potential benefits and risks.							
3D printed designer drugs	3D printed designer drugs are pharmaceuticals produced using 3D printing technology, often with customised dosages or formulations to meet individual patient needs. The technology has the potential to revolutionise drug manufacturing and personalised medicine, but also raises concerns about safety, regulation, and access.							1 2
Ethical considerations in clinical trials	Ethical considerations in clinical trials describes growing concerns about the ethical implications of conducting clinical trials in the Global South, particularly regarding the relevance of trial designs compared to local health priorities.							1 2 3 4
Rising costs and affordability of medicine	Rising costs and affordability of medicine describes the increasing cost of new medicines, particularly for non-communicable diseases (NCDs) like cancer and diabetes, which is a major barrier to access in the Global South.							1 2 3 4 5
Drones for delivery	Drones for delivery described the use of drones equipped with secure compartments that can carry medicines over long distances and difficult terrain. These unmanned aerial							

	vehicles can be pre-programmed or remotely piloted to deliver medications directly to patients' homes or healthcare facilities, especially in remote or underserved areas.							
Precision medicine	Precision medicine describes medical treatment to individual characteristics, including genetics, environment, and lifestyle, for more effective and safer care. It can address unique disease burdens, improve treatment outcomes for diverse populations, and optimise limited resources by targeted interventions. It certainly is an emerging issue (it is not necessarily relevant as much today) especially in the Global South which has resource constraints. However new technological advancements could have significant future impacts.							1 2 3 4 5
Integration of traditional and Western medicine	The integration of traditional and Western medicine describes the growing concern about the future of traditional medicine due to the power and influence of globalising forces, and the challenge of creating complementarity between Western and traditional, including issues of affordability, accessibility, and reliability.							1 2 3 4 5
Antibiotic resistances	This describes the increasing prevalence of sudden fungal or bacterial antibiotic resistance in microorganisms where antimicrobial drugs were previously effective in treating infections. This poses a significant threat to global health as it can render existing treatments ineffective.							
Intellectual property rights and generic competition	Intellectual property rights and generic competition describes how intellectual property rights can restrict the production and availability of generic versions of essential medicines. There is increasing pressure to balance IPR with public health needs through voluntary licensing and patent pooling.							1 2 3
Counterfeit and substandard medicines	Counterfeit and substandard medicines describes the proliferation of "street medicines" or fake drugs. For example, in Cameroon, significant percentages of medicines supposedly containing active ingredients like Chloroquine, Quinine, and Sulfadoxine Pyrimethamine were found to have insufficient or no active ingredients.							1 2
Affordability of innovative new technologies	Affordability of innovative new technologies raises questions about affordability and equitable access in the global South of new medicines and health technologies, such as gene therapies and personalised medicine, and the health divide this may create.							1 2 3 4 5
Supply chain disruptions	Supply chain disruptions describe the disruption of the production and distribution of essential medicines. The COVID-19 pandemic exposed vulnerabilities in global supply							1 2 3 4 5

	chains, which highlights the need for more resilient and diversified supply chains, as well as increased local production capacity in the Global South.							
Shifting disease burden	Shifting disease burden describes the epidemiological transition in the Global South, with a rising burden of NCDs alongside infectious diseases, changing the landscape of essential medicines.							1 2 3 4
Rejection (or loss of belief in) of mainstream medicine	Rejection (or loss of belief in) of mainstream medicine describes the rise in the rejection of modern medicine, for example as evidenced with the anti-vax movement. This stands in contrast to public health education which aims to increase the adoption of helpful vaccines and medicines.							1 2 3 4 5
Preventative paradigm	The preventative paradigm describes a growing recognition that preventing diseases and promoting well-being through healthy lifestyle choices and proactive measures can be more effective, sustainable, and cost-efficient than solely relying on corrective medicine. While it is mainstream in health promotion discourse it is not comprehensively integrated into many health system strategies.							1 2 3 4 5
Open source medicine	Open source medicine is a collaborative approach to drug discovery and development that emphasises transparency, sharing of knowledge and resources, and the removal of intellectual property barriers. It aims to democratise the pharmaceutical industry and make essential medicines more accessible and affordable, particularly in the Global South where healthcare disparities are prevalent.							1 2 3
Inequitable research focus	Inequitable research focus describes the disproportionate research focus on diseases prevalent in the Global North, while conditions more common in low-income settings receive less research attention.							1 2 3 4
Data and transparency	Data and transparency describes the lack of transparency in pharmaceutical pricing and clinical trial data that hinders evidence-based decision-making and price negotiations. There is a growing demand for greater transparency and data sharing to ensure fair pricing to support access to essential medicines for vulnerable populations.							1 2 3 4

Financing

0 - Patient
1 - Primary
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3 - State / National
4 - Regional
5 - Global

Issue	Description	0	1	2	3	4	5	References
Growing out-of-pocket payments	Growing out-of-pocket payments describes out-of-pocket sources of financing in both low- and middle-income countries, which can lead to financial hardship for individuals and families.							1 2 3 4 5
Medical crowdfunding	Medical crowdfunding is the practice of raising funds from a large number of people, typically online, to cover medical expenses that are not covered by insurance or government programs. This approach leverages social networks and online platforms to connect individuals in need with potential donors who are willing to contribute to their medical costs.							
Equity-focused financing mechanisms	Equity-focused financing mechanisms describe a growing focus on developing financing mechanisms that promote equity, such as health equity funds and community-based health insurance.							1 2 3 4
Epidemiological transition	Epidemiological transition describes the rising prevalence of non-communicable diseases (NCDs) like diabetes, cardiovascular diseases, and cancer alongside existing infectious diseases - which creates a greater financial load. Under Essential Medicine this is referred to as “Shifting disease burden”, which is the identical issue, but in a different aspect.							1 2 3 4 5
Integration of fragmented financing schemes	Integration of fragmented financing schemes describes how many countries in the Global South face challenges with numerous small, fragmented funding pools, which limits the potential for cross-subsidy, increases complexity and increases administrative costs.							1 2 3 4

Sustainable financing for Universal Health Coverage (UHC)	Sustainable financing for UHC describes the challenge and issue of the sustainability of current sources of public financing as countries push for universal health coverage.							1 2 3
Innovative financing mechanisms	Innovative financing mechanisms describe an emerging interest in exploring new financing mechanisms, such as social impact bonds, to fund health programming.							1 2 3 4
“Triangulated” funding	“Triangulated” funding models describe funding models being innovated that link a variety of funding stakeholders in the funding mechanism, for example government contributions linked with employer and user contributions, such as with Ghana’s NHIS.							
Funding crunch	Funding crunch describes the double challenge of increasing populations driving high costs while greater pressure is being put on funding. The cost of healthcare is rising globally, but the burden is disproportionately felt in the Global South. Factors like ageing populations, the rising prevalence of non-communicable diseases (NCDs), and increasing technological advancements are driving up healthcare costs. This is obviously related to “Sustainable financing for Universal Health Coverage (UHC)” but is more specifically about the “double challenge”.							
Localisation of research funding	Localisation of research funding describes a growing recognition of the need to increase local control over research funding to address context-specific health challenges.							
Climate change on health financing	The impacts of climate change on health financing, such as extreme weather events, vector-borne diseases, and food insecurity, are becoming increasingly evident requiring Health System resilience financing. With increasing climate-related health impacts, there's an emerging need for financing mechanisms that can support the development of climate-resilient healthcare systems specifically.							
Pharmaceutical pricing and access	Pharmaceutical pricing and access describes the high cost of essential medicines, particularly for NCDs, which poses a significant barrier to access in the Global South. Exploring mechanisms like price negotiation, generic drug production, and pooled procurement can help ensure affordability and availability of essential medicines. While related to “Epidemiological transition”, this is more specifically about the political economy of drug pricing.							
Sustainable local financing	Sustainable local financing describes a shift from external donor funding to sustainable local financing. There is a growing recognition of the need to move away from reliance on							1 2 3 4 5

	external donor funding towards more sustainable and innovative local financing mechanisms for healthcare.							
South-South funding models	South-South funding models describes an emerging interest in exploring South-South funding streams, which could offer more balanced power dynamics between Global South nations.							1 2 3
Cost savings from digital health technologies	Cost savings from digital health technologies describes opportunities for improving access to care, efficiency, and cost-effectiveness by using digital health technologies including telemedicine, mobile health (mHealth), and AI. It is acknowledged that other factors listed here assumes the potential for the very opposite for digital technologies, making this issue high in uncertainty.							1 2 3 4 5 6
Migration and health	Migration and health describes the significant implications for health system financing of migration and the movement of people across borders, whether due to economic opportunities, conflict, or environmental factors. Serious disruptions such as climate change impacts may have profound influences on the movement of people which will require strategies for funding and supporting vulnerable populations.							1 2 3 4

Leadership and Governance

0 - Patient
1 - Primary
2 - Secondary
3 - State / National
4 - Regional
5 - Global

Issue	Description	0	1	2	3	4	5	References
Patient advocacy	Patient advocacy groups / movements describe the potential for patient based movements to play a role in advocacy and political pressure for change.							1 2 3
Ethical rule breaking	Increasing (ethical) rule breaking describes how health professionals are managing system challenges by deliberately breaking rules and procedures, for example how a doctor may go around the official medication system to be able to provide patients with affordable medicines.							1 2 3
Capacity building for health system leadership	Capacity building for health system leadership describes an emerging focus on building local capacity for health system leadership, including research leadership and management skills. This can take the form of workforce development strategies, leadership education and action learning.							1 2 3 4
Localisation of research leadership	Localisation of research leadership describes a growing recognition of the need to increase local control over research funding and leadership to address context-specific health challenges.							1 2 3 4
Decentralisation and local governance	Decentralisation and local governance describes a growing trend towards decentralisation of health services in the Global South, aiming to improve responsiveness to local needs and empower communities. This queries to what extent governance can be decentralised to give more decision-making power to communities, women and vulnerable groups in having their health needs so supported.							1 2 3 4 5
AI dependance	AI dependance describes a reduced system capability in a time of crisis or rapid change. It is posited here that artificial intelligence could lead to deskilling, thus in times of crisis when AI is							1 2

	not available, people will not have the skills and ability to respond to the challenges they are facing. This has correspondence with other issues that discuss deskilling from artificial intelligence, however this aspect focuses on the loss of leadership capabilities from over dependence on AI decision making.							
Leadership capacity and development	Leadership capacity and development describes the shortage of skilled and effective leaders in health systems in the Global South, particularly at the local and regional levels. It questions the commitment to investments in leadership development programs that focus on building technical skills, leadership, ethical decision-making and health system governance.							1 2 3 4
Social protest	Social protest describes the potential for civil disobedience to drive institutional change. We have recently seen a number of youth protest movements that have disrupted and even changed governments. This questions the potential for civil disobedience to play a role in how sector reform.							1 2 3 4 5
Crisis management reduces leadership capacity	Crisis management reduces leadership capacity describes the challenge where the management focus on constant crisis obscures a more strategic focus on building better health systems. As we move into an era typified by disruption and turbulence will health systems get bogged down in crisis management or will they be able to strategically build towards greater capacity?							1
Shifting power dynamics	Shifting power dynamics and multi-stakeholder governance describes a growing recognition of the need for more inclusive and participatory models that involve diverse stakeholders, including communities, civil society organisations, and the private sector.							1 2 3 4 5
Demand for greater accountability and transparency in health system governance	Demand for greater accountability and transparency in health system governance describes a growing demand to address corruption and mismanagement. This requires strengthening oversight mechanisms, promoting ethical leadership, and empowering communities to hold decision-makers accountable.							1 2 3 4 5
Data-driven decision making	Data-driven decision making describes the potential to conduct evidence-based decision-making and policy development using robust data analytics. Currently the availability and quality of health data in many Global South countries remain limited, hindering evidence-based decision-making and policy development. This questions the ability of countries to build suitable health information systems and investing in data collection and analysis for data interpretation, utilisation and decision making.							1 2 3 4 5

Decolonisation of global health	Decolonisation of global health describes emerging movements, such as the Global Health Decolonisation Movement in Africa, that challenge traditional power structures in global health governance.							1 2 3
Political instability	Political instability describes the potential for regions to be affected by conflicts and violence, where political instability markedly undermines research leadership and health system governance due to disruption of infrastructures and capacity development initiatives. While it is not a global trend political instability can affect a variety of different countries and is an important factor in HS futures.							1 2 3 4
Climate health discourse	Mainstreaming of climate health discourse describes how climate change emerged into the health discourse and how climate health has slowly mainstreamed and will continue to do so. As climate change generates uneven impacts in different regions to what extent will climate health practices and policies become part of overall health policy?							1 2 3 4
Authoritarian governments	Authoritarian governments describes the recent shifts towards authoritarianism seen in different political systems around the world and the effects this can have on health discourse. Will authoritarian governments support women's empowerment in health systems, reproductive rights, and support the goals for universal health coverage?							1 2 3
South-South collaborations	South-South collaborations describes an emerging focus on facilitating and enhancing collaborations within and between Global South institutions to develop capacity, solidarity, mutualise resources and design interventions that are better regional fit.							1 2
Ethical considerations in research	Ethical considerations in research governance describes the issues of data ownership, consent, and the potential for "digital epistemic colonialism" emerging as important ethical considerations in health system governance.							1 2 3 4 5

Disaster Resilience

0 - Patient
1 - Primary
2 - Secondary
3 - State / National
4 - Regional
5 - Global

Issue	Description	0	1	2	3	4	5	References
Hybrid Organisational Models	There's a growing trend towards organisational structures that blend formal and informal healthcare delivery. These models often integrate community health workers, traditional healers, and mobile health units with conventional healthcare facilities. For instance, in parts of sub-Saharan Africa, we're seeing the emergence of networks that combine public health facilities, private clinics, and community-based care providers under flexible governance structures.							
Localised Supply Chains	Some regions are developing local production capabilities for essential medicines and supplies. In India and Brazil, there are early signs of government support for local pharmaceutical production, reducing dependency on global supply chains.							
Cross-Border Health Networks	Initiatives like the West African Health Organisation's cross-border disease surveillance networks hint at growing regional cooperation. These nascent networks could evolve into more comprehensive health system support structures.							
Climate-Resilient Health Infrastructure	A few projects in flood-prone areas of Bangladesh and cyclone-affected regions in the Philippines are experimenting with climate-resilient health facility designs. This could indicate a future trend in infrastructure development that anticipates and mitigates climate-related disruptions.							

Integrated Traditional Medicine	Beyond simple recognition, there are early signs of systematic integration of traditional medicine into formal health systems. In China and India, research programs are exploring how to scientifically validate and incorporate traditional remedies into mainstream healthcare.							
Community-Owned Health Insurance	Small-scale experiments with community-managed health insurance schemes in countries like Rwanda and Ghana could signal a shift towards more localised, community-driven approaches to health financing. In Ethiopia, the implementation of CBHI since 2011 has shown promising results. A recent study found that CBHI membership increased universal health coverage by 24.8% and reduced catastrophic health expenditure by 79.4%. This aligns with findings from other African countries like Rwanda, Ghana, and Senegal, where CBHI has been implemented as a strategy to achieve universal health coverage							
AI-based Health Surveillance Systems	AI-based health surveillance systems are emerging to track disease outbreak risks, global disease outbreak tracking, predict potential epidemic spread, detection of potential health threats, and analyze and validate outbreak reports. In addition to artificial intelligence, these may also integrate satellite and drone-based disease vector tracking, genomic sequencing AI for mutation prediction, and social media sentiment analysis for early outbreak detection. Examples include: BlueDot (Canada), HealthMap (Harvard Medical School), WHO's Epidemic Intelligence from Open Sources (EIOS), China's AI Epidemic Prediction System, and ProMED (Program for Monitoring Emerging Diseases).							
Digital platforms for pandemic response	Leverages technology to rapidly scale pandemic response efforts. These platforms facilitate efficient vaccine distribution, track immunization records, and disseminate crucial public health information, enabling timely interventions and improving overall pandemic management (e.g. India’s CoWIN developed during COVID-19)							
Community-Based Disaster Management (CBDM) groups	Community-Based Disaster Management (CBDM) is a participatory approach that empowers local communities to assess, prepare for, respond to, and recover from disasters by leveraging indigenous knowledge, local resources, and collaborative decision-making processes. This strategy shifts disaster management from a top-down, government-centric model to a bottom-up approach that recognizes community members as active agents in risk reduction, emphasizing their resilience, traditional coping mechanisms, and intimate understanding of local environmental and social dynamics (e.g. Forum Pengurangan Risiko Bencana (FPRB) in Indonesia)							

Flexible funding mechanisms	Flexible and rapid funding mechanism designed to provide immediate financial resources to community-based organizations for quick disaster response and mitigation efforts (e.g. "emergency envelope" established by the Consortium (formerly La Nina Consortium) in Kenya)							
Decentralised health system with a built-in surge capacity	Distribute healthcare services across different levels, from local clinics to regional hospitals, allowing for greater accessibility and responsiveness to local needs. Enables rapid expansion of healthcare services during crises through a network of interconnected facilities and flexible staffing. (eg Vietnam's "wheel" model).							
Integrated disaster response platforms	Connects health systems with environmental, social, and economic resilience efforts (e.g. Colombia's National System for Disaster Risk Management (SNGRD))							
Collaborative response agreements	Cross-border or cross ministerial health resilience agreements to share resources and expertise during regional crises. For example Bangladesh has created multi-ministerial rapid response teams that can quickly mobilize during climate-related disasters.							