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# Governing health service purchasing agencies: Comparative study of national purchasing agencies in 10 countries in eastern Europe and central Asia

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ABSTRACT

This study discusses findings from comparative case studies of the governance of health services purchasing agencies in 10 eastern European and central Asian countries established over the past 30 years, and the relationship between governance attributes, institutional development, and the progress made in strategic purchasing. The feasibility and effectiveness of implementing international recommendations from the health sector and wider public sector governance literature and practice are also discussed. The study finds that only those countries that have transitioned from middle to high-income status during the study period have been successful in comprehensively and consistently implementing internationally recommended practices. Moreover, these countries have made varying progress in developing capable purchasers with technical and operational independence, as well as advancing strategic purchasing. However, the current middle-income countries (MICs) in the study have implemented only certain elements of recommended governance practices, often superficially. Notably, the study reveals that some international recommendations, particularly those related to higher degrees of purchaser autonomy and the associated governance structures observed in western European social health insurance funds, have proven challenging to implement effectively or sustain in the MICs. None of the MICs succeeded in strategic purchasing beyond a limited agenda or scale, and even then, only implementing and sustaining them during favorable conditions. Difficulties in maintaining these achievements can be attributed, in part, to governance deficiencies. However, setbacks are commonly linked to periods of political and economic instability, which in turn lead to fluctuations in policy priorities, institutional instability, and inadequacies in health budgets. The study findings point to some actions related to civil society and stakeholder engagement, accountability frameworks, and digitalization in MICs that can facilitate continuity in health reforms and the functioning of purchasing institutions despite these challenges. The findings of the study provide important lessons for countries designing or newly implementing health purchasing agencies and for countries reviewing the performance and governance of their health purchasing agencies with a view to developing or strengthening strategic purchasing.

## 1. Introduction

Over the past two to three decades, a significant economic and social transition has occurred in countries across eastern Europe and central Asia. As part of this transition, many countries from the region have implemented health financing reforms that involve the establishment of a single national purchasing agency. As a result of the high degree of distrust in the government, a system was preferred in which the health purchasing function operated at arms-length from the Government. In addition, through the introduction of a purchaser-provider split, these countries were hoping to improve efficiency and increase transparency. Lastly, in the economically fragile transition years, adding payroll contributions to the revenue base was seen as a more stable funding source than general tax and less prone to political tinkering [8,13]. The newly

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introduced purchasing agencies are today known by various titles, such as health insurance funds (HIF) and national health services (NHS) and are financed through some combination of mandatory payroll contributions (in some countries) and government budget allocations. Although the names and revenue sources of these agencies vary, they all share a common function of purchasing a benefit package of health care services and products from health care providers. Therefore, they can be referred to as purchasing agencies or purchasers.

These countries have attempted to establish strategic purchasing, which is a process of "continuous search for the best ways to maximize health system performance by deciding which interventions should be purchased, how, and from whom" [7]. This process aims to enable the efficient use of resources and sends signals to health providers to improve the quality of health services.

The development and performance of publicly financed health service purchasing agencies is greatly influenced by governance arrangements established for the purchasing agency. Governance, in this context, refers to an overarching health systems function that ensures strategic policy frameworks are in place and combines effective oversight, coalition-building, regulation, attention to system-design, and accountability.

Governance "affects the likelihood that workable policies are adopted, that they are implemented, and that they produce intended results" (Greer et al., 2019). Effective governance arrangements are critical enablers for strategic purchasing, because making purchasing more strategic requires strong coordination of all key actors, clear rules for decision-making, and appropriate regulations [10,17]. Implementing all the element of the broad definition of strategic purchasing is challenging. Klasa et al. [5] founds that ten western European countries did not manage to implement strategic purchasing as it is defined in any of the existing definitions, but that there are specific components of strategic purchasing that can provide benefits to health systems. One element they mention is that policymakers should create powerful, separate purchasers with the legal position, data, and economic power to make purchasing strategic, which is the focus of this paper. Effective governance is also closely linked to the capacity and capability of public institutions. The World Bank's World Governance Indicators (WGI), for example, include the domains of government effectiveness, regulatory quality and rule of law, alongside indicators of control of corruption, voice and accountability, and political stability and absence of violence. World Bank governance support to countries is premised on a view that "building open, effective, and accountable institutions for inclusive development is critical" for development [14]. Therefore, governance is critical to the development of health purchasers as well as strategic purchasing. Research has shown that good governance is essential for the effective functioning of health systems [4].

This paper presents findings of a study of how governance of the purchasing agency has influenced their institutional development and the implementation of new purchasing policies among a group of 10 countries in eastern Europe and central Asia (Armenia, Azerbaijan, Estonia, Georgia, Kyrgyzstan, Latvia, Lithuania, Republic of Moldova, Ukraine, and Uzbekistan).

All ten were middle income countries (MICs) when they first established health purchasing agencies, though the three Baltic states are now high income countries (HICs). These countries were selected based on their shared institutional history, characterized by a tax-financed, publicly provided health system following the Semashko model. Additionally, their political and economic systems exhibited commonalities in the past, and each of them had implemented a single purchaser model for health financing. In most countries government revenues are the only or dominant source of public spending on health (see Table 1). Three countries – Estonia, Lithuania and the Republic of Moldova – use compulsory social insurance contributions as their largest source of revenues. This paper also investigates the correlation between World Governance Indicator (WGI) scores (see Appendix 1) and the quality of governance of the purchasing agencies.

The participating countries can be classified into three broad groups, which we found salient for understanding and comparing their experiences. The first group consists of three HICs: Estonia, Latvia, and Lithuania, along with four MICs: Armenia, Georgia, Kyrgyzstan, and the Republic of Moldova, all of which have long-established reforms. The second group includes three countries where reforms were either fully implemented only in 2020 (Azerbaijan, Ukraine) or were in the pilot stage of implementation (Uzbekistan).

This study aimed to draw lessons on the key governance-related drivers of and barriers to progress, relevant to MIC contexts [20]. This paper then assesses the implications of the study findings for conventional international recommendations to such countries for good

**Table 1**
Key characteristics of the purchasing agency.

| Country group | Country | Main revenue sources | Name of the purchasing agency | Year of purchaser establishment (year of implementation) | Legal status as of 2023 |
|---|---|---|---|---|---|
| HICs with long-established reforms | Estonia | Contribution rates and formula-based budget transfers. Negotiated additional budget transfers only in exceptional circumstances. | Estonian Health Insurance Fund | 1992 (current legal status 2001) | Autonomous legal person in public law |
| | Latvia | Mostly negotiated state budget transfers, but also small share of contributions | National Health Service | 2011 | State agency – legal entity |
| | Lithuania | Contribution rates, formula-based budget transfers, negotiated budget transfers for delegated functions | National Health Insurance Fund | 1992 (current legal status 2003) | Public authority established under the Law – legal entity |
| MICs with long-established reforms | Armenia | Negotiated state budget transfers | State Health Agency | 1997 | Subdivision of the MoH |
| | Georgia | Negotiated state budget transfers | National Health Agency | 2020 (2013–2020 under the Social Service Agency) | State agency – legal entity |
| | Kyrgyzstan | Contributions but mostly negotiated state budget transfers | Mandatory Health Insurance Fund | 1997 (nationwide 2005) | Independent semi-governmental organization – legal entity |
| | Republic of Moldova | Contributions and a fixed share of the state budget | National Health Insurance Company | 2001 (nationwide 2004) | Autonomous state legal entity |
| MICs with recent/ ongoing reforms | Azerbaijan | Mostly contributions and negotiated state budget transfers on behalf of non-contributors | State Agency for Mandatory Health Insurance | 2007 (nationwide 2021) | Autonomous state legal entity |
| | Ukraine | Negotiated state budget transfers | National Health Service of Ukraine | 2018 | Legal entity (central executive body) operating under public law |
| | Uzbekistan | Negotiated state budget transfers | State Health Insurance Fund | 2020 (pilot in 2021) | Autonomous state legal entity |

practice in governance of these public sector agencies. The mechanisms examined at the level of purchasing agencies encompass elements such as purchaser mandate and autonomy, accountability, transparency and anti-corruption measures, and stakeholder participation and engagement. It seeks to identify important contextual and facilitative factors to enable governance mechanisms to operate effectively. The study considered the relationship of governance to country progress in implementing new purchasing policies but did not attempt to assess the impact of purchasing on quality or outcomes.

## 2. Materials and methods

The study adopted a comparative case study methodology, using a conceptual and analytical framework based on WHO's *Governance for Strategic Purchasing: An Analytical Framework to Guide a Country Assessment* [18]. The study was carried out in three stages. The first involved analysis of existing legal, regulatory and policy documents, reviews, and studies to identify key design characteristics of the health financing system, institutional and governance structures and functions for the purchasing agency, and important governance processes at both the health system level and the purchasing agency level. The literature review included both published and unpublished studies, as well as any previous assessments of the health purchaser or health financing system relevant to the study objectives. Review findings were classified using the terminology and key words in the WHO framework [18]. Key institutional characteristics of governance structures, and processes for each country (drawn from the WHO framework) were tabulated to provide a consistent description and basis for comparison of governance systems across countries.

The second stage of the study comprised interviews with three to four key informants in each country, including current or former senior officials from the Ministry of Health (MoH) and the purchasing agency, as well as independent experts from academia, think tanks, the Ministry of Finance (MoF), or development agencies. A total of 33 persons were interviewed, with tailored questions for each country based on the stage of implementation of their health purchasing reforms. Interview questions explored the functionality of governance structures, institutions and processes and explored which governance mechanisms had been effective as drivers, enablers or barriers affecting institutional development of the purchaser and progress in strategic purchasing in each country. Interviews explored the impact of purchaser capacity and of broader economic, political and stakeholder context on the effectiveness of governance mechanisms in influencing strategic purchasing. All interviews were conducted by two or three researchers and recorded. Themes and key words from interviews were summarized by one author and reviewed by a second author. The analytical approach to forming conclusions looked for patterns of similarities and differences across countries in governance mechanisms' functionality and effectiveness in influencing strategic purchasing, and related patterns in the impact of broader contextual factors on governance. Proposed conclusions and recommendations were arrived at by discussion among the three authors.

In the third stage of the study, data summaries of findings from the first and second stages were validated with country counterparts. The draft paper was shared with participating country representatives for their feedback. A more detailed list of key sources of information, key informants, and the interview guide is provided in Appendix 2.

It is important to note that the data presented in the study reflect the period prior to the COVID-19 pandemic and the war in Ukraine, which have had a significant impact on the health systems and health financing in the region.

## 3. Results of the 10-country study

### 3.1. Purchaser mandate and autonomy

All 10 countries established their purchaser at an early stage as an independent state legal entity, with its own budget, though some countries initially established decentralized purchasers and later consolidated them. Georgia abolished its first health purchaser, later re-establishing it within an existing legal entity responsible for welfare payments 2013–2020; it has since created a separate agency. Armenia's purchasing agency progressively lost its independence and by the time of the study was an organizational division within the MoH. Latvia also reduced the autonomy of its purchaser in 2011 organizational reforms, though it remains a separate legal entity.

The study tabulated the role and level of autonomy of purchasing agencies in relation to key health financing policy decisions, including the budget, contribution rates, benefit package, provider payment methods and rates and contracting (see Table 2). Among the countries examined, Estonia's HIF has the largest role and greatest autonomy in law and regulation at the level of its Supervisory Board (SB), and at management board level on contracting matters. Although Azerbaijan's and Uzbekistan's HIFs also have significant formal authority in regulation, both are still at an early stage of development and in practice all decisions are overseen on a day-to-day basis by a SB (in Uzbekistan) or oversight group (in Azerbaijan) chaired by the President's health advisor. The two least autonomous purchasers across various decision domains are Armenia and Georgia.

In general, the purchasers have greater autonomy on contracting and payment operations –operational functions - than on health financing policies. In all countries, parliament or the President approves the annual budget and contributions rates (where relevant), though in most countries at the level of broad service categories or a single line. Interviews brought out differences, however, in the role HIFs played in formulation of health financing policies – which reflects the extent to which they were treated by MoH and government as a source of independent technical expertise on health financing.

In the most autonomous funds (Estonia, Lithuania), the formulation of policies was initiated and carried out by the HIFs and policy recommendations approved by the HIF SB in Estonia or Minister of Health in Lithuania. Conversely, in the least autonomous funds (Armenia, Georgia), the MoH leads policy development, with the HIFs' role confined to implementation of provider payment operations, accounting and financial reporting. In the other countries, the MoH is more likely to initiate new health financing policies with purchaser input provided through joint working groups. Additionally, external development projects and technical assistance may play a significant role in some countries (Kyrgyzstan, Moldova).

In eight of the 10 countries, including all of the MICs and Latvia, the MoFs play a dominant role in setting the aggregate annual expenditure limit for purchasers. This entails setting a budget ceiling based on historic expenditures, with adjustments made depending on fiscal space through negotiations, and with limited use of demand forecasting or benefits package costing in setting the ceiling. Although most countries have a multi-year budget framework, this is not actively used for planning future years of health sector budgeting in any of the MICs. Though the purchaser itself in all cases formulates the proposal for more detailed allocation of the budget, in most countries, this is subject to approval by a higher level of authority. Budgets in all 10 countries are formulated and approved by programme or output-oriented categories, such as levels or types of health services, rather than input categories such as wages, medicines, or utilities.

Estonia and Lithuania, the two countries with predominantly contribution-based financing of their purchasing agency, have a more arms-length relationship to the government's annual budget process. Both countries allocate state budget contributions to the HIF for the economically inactive population, but these are based on stable

**Table 2**
Decision-making authority for health financing and purchasing.

| Country group | Country | Annual budget | Benefit package | Provider payment methods | Provider payment rates | Contract terms |
|---|---|---|---|---|---|---|
| HICs with long-established reforms | Estonia | Parliament (one line), SB of HIF (detailed) | Parliament (broad level), Government (health services), HIF (outpatient medicines) | Government | Government, MoH (methodology), HIF (detail) | Parliament (principles), HIF SB (selection criteria), HIF Management Board (terms, financial part) |
| | Latvia | Parliament | Government | Government | Government | Government (principles), NHS and MoH |
| | Lithuania | Parliament (separate budget law, broad service categories), MoH-chaired Council (detailed) | Parliament (broader level), MoH (detailed) | MoH | MoH | MoH (general rules), Director General of HIF |
| MICs with long-established reforms | Armenia | Parliament (by programmes) | Government | Government | Government | MoH |
| | Georgia | Parliament | Government | Government | MoH | Government |
| | Kyrgyzstan | Parliament (separate budget law, broad service categories) | Parliament (broader level), Government (health services), MoH (outpatient medicines) | Government | Government | Government (template), MoH (input norms), HIF (volumes, subsidies to deficit providers) |
| | Republic of Moldova | Parliament (separate budget law, broad service categories) | Parliament (broader level), Government (detailed) | HIF Company and MoH | MoH and HIF Company joint order, Government (medical salaries) | Government (sample contract), MoH and HIF Company joint order |
| MICs with recent/ ongoing reforms | Azerbaijan | Parliament | Government | HIF | Government | HIF |
| | Ukraine | Parliament (one line), Government (detailed) | Government | Government | Government | Parliament (principles), Government (detailed regulation, sample contract), NHS and MoH (volumes, indicators) |
| | Uzbekistan | Cabinet of Ministers | President (principles), MoH | President (principles), HIF SB | President (principles), HIF SB | President (principles), SB (contract terms) |

formulae, whereas all the other countries negotiate budget increments annually. The stable multi-year, rule-based approach used in Estonia and Lithuania, underpinned by projections of future demand and costs of the benefit package and combined with policies allowing purchasers to hold reserves, appears to create a more stable medium to longer-term budget constraint for the purchaser. In Estonia, interviewees suggested this helped to create a credible budget constraint within which the SB of the HIF focuses attention on increasing efficiency, while maintaining or improving coverage and access.

Estonia gives its HIF the most substantial autonomy over internal management. It delegates to the HIF SB authority to appoint the chief executive, and approve organizational structures, and allows employment of managers and staff under private labour law. In other countries, either civil service administrative policies apply, or similar administrative rules are applied under laws governing public sector agencies.

### 3.2. Accountability

The question of whom the purchaser is accountable to and who oversees the purchaser has been a subject of debate, even conflict and instability in a number of countries. At the time of our study, in four countries, the purchaser is accountable in law directly to the Minister of Health, and in three it is accountable to the government via the Minister of Health. Only Estonia's HIF is accountable to an SB that is functioning fully as the governance body. In Kyrgyzstan, the HIF is subordinate to the Government in law, but the government later established a so-called Supervisory Board by regulation, with the intention of clarifying and unifying responsibility for HIF oversight and introducing stakeholder participation. However, in practice, the HIF has multiple parallel lines of accountability, with MoH and MoF functioning as stronger direct lines of control and oversight under their statutory mandates than the SB. Although both ministries are represented on the SB, it largely plays a consultative/advisory role, not exercising effective oversight and approving only some minor matters. Azerbaijan's and Uzbekistan's purchasers are accountable to the President, reflecting both the Presidency's strong role in these countries and strong presidential interest in ensuring rapid implementation of reform (see Table 3).

The three HICs have a well-developed accountability framework for their purchasers, with established responsibilities and processes for setting the organisation's strategic objectives and plans in alignment with national health strategies; monitoring performance across a balanced set of domains (financial control, access, quality of services, efficiency and health outcomes); and using well-functioning internal audit and external audit to assure financial control. In Lithuania and Latvia, accountability frameworks used across the public sector and its agencies provide a strong basis for health purchasers' accountability, and ensure open merit-based hiring and performance agreements for chief executives, managers and staff. Most of the MICs have some of these elements of accountability in place, but none has all of them. A commonly stated MIC concern is that monitoring and audit focus predominantly on finances and regulatory compliance, not on strategic objectives such as improved financial protection, access or health outcomes. Few of the MIC purchasers have articulated health financing objectives in some form of strategy documents.

All MIC purchasers except Armenia and Georgia have an Internal Audit function, but it is underdeveloped. External audit in all countries is conducted by the state audit body (Azerbaijan's and Estonia's purchasers also hire commercial auditors), but these bodies function poorly in some MICs, taking a punitive approach focused on compliance with often-outdated regulation and imposing very high compliance costs. By contrast, a modernized state audit body in Georgia (as in the HICs) focuses on performance and value as well as financial audit. Among the MICs, only Ukraine uses a performance agreement between Minister of Health and CEO of the NHS, as required under wider reforms of public administration. Other MICs noted a pattern of replacement of HIF CEOs when Government or Minister change, de-linked from performance, which weakens accountability. The smaller MICs spoke of a culture of personalized accountability, rather than an objective, performance-based approach. The least autonomous purchasers – in Armenia and Georgia – experience hands-on management by the MoH's, without an

**Table 3**
Lines of accountability and oversight bodies.

| Country group | Country | Line of accountability | Supervisor/ Advisory body | Governing body chair | Appointment of other governing body members | Monitoring of financial & other reports | Appointment of CEO |
|---|---|---|---|---|---|---|---|
| HICs with long-established reforms | Estonia | SB | SB, 6x members (2 state, 2 employer, 2 beneficiary) | Minister of Health, ex officio | Minister of Finance – ex officio<br>Employer and beneficiaries representatives nominated by national bodies | SB | SB |
| | Latvia | MoH | Advisory National Health Service Advisory Body | – | – | MoH | MoH |
| | Lithuania | Advisory Compulsory Health Insurance Council of stakeholders | Elected amongst the members, 2 yearly (mostly Minister of Health) | Minister of Health, in line with MoH Order, 2 year terms | MoH | MoH | Advisory Compulsory Health Insurance Council of stakeholders |
| MICs with long-established reforms | Armenia | MoH | No | – | – | MoF (finances), MoH | MoH, PM agrees |
| | Georgia | MoH | No | – | – | MoF (finances), MoH | MoH |
| | Kyrgyzstan | Government, via MoH & MoF | Mainly advisory "Supervisory Board" – approves some minor decisions | Vice Prime Minister, ex officio | Government, some members ex officio | MoF (financial), MoH | PM |
| | Republic of Moldova | Government, via MoH on policy & regulation | Advisory Administrative Council | State Chancellery representative, ex officio | HIF director in line with the Government regulation, 4 yearly | Administrative council, MoH | Government |
| MICs with recent/ ongoing reforms | Azerbaijan | President | Transitional inter-ministry group chaired by President's Health Advisor | – | – | President's office, MoF (finances), Cabinet of Ministers | President |
| | Ukraine | Government, via MoH | Advisory Public Control Council of civil society Representatives | Council elects the Chairman from its members Bysimple majority vote, 2 yearly | Government, based on public internet-based Voting, 2 yearly | MoH | Government |
| | Uzbekistan | SB & President | Supervisory Board | First Deputy Advisor to the President, ex officio | Government & local government representatives, ex officio | SB | Government |

accountability framework for anything other than financial control.

### 3.3. Transparency and anti-corruption

The HIC and Ukraine purchasers practice timely transparent publication on their websites of all regulatory documents, financial and non-financial reports and procurement documents as well as the publication of data. For Ukraine's relatively new purchaser, this has been helpful as a means of establishing its reputation with government ministries (such as the MoF) and civil society. Four countries do not yet publish annual reports of any sort (Armenia, Georgia, Kyrgyzstan, Uzbekistan), though some information is made public in most of these through government budget publications.

Financing reforms in some MICs have had an explicit focus on reducing some forms of corruption, particularly informal payments by patients. Reform evaluations find that Kyrgyzstan and Ukraine achieved some success in this [3,11]. However, some of the MICs have lacked a focus on anti-corruption measures within the purchaser itself, which in countries with known public sector corruption and low trust in institutions, has led some countries to remove purchaser autonomy. In order to build trust, Ukraine's NHS has a multi-faceted anti-corruption strategy incorporating civil society oversight, organizational values, open data, publication, use of digitization, development of rules and standard operating procedures to limit administrative discretion. However, limits on discretion currently force the purchaser to contract all qualified providers, limiting scope to use criteria-based selective contracting strategically to tackle excess and unequally distributed health care capacity.

Most of the countries benefit from having implemented digitization and various other anti-corruption reforms of the MoF's treasury management system. All but two purchasers (Azerbaijan and Lithuania) use the treasury management system to execute payments and manage cash balances, and Lithuania is switching from using a commercial bank to using the treasury account system from 2023, perceiving it as more secure. The use of treasury accounts has helped to increase MoF and wider government trust of the purchasing agency in some countries where there has been a history of distrust associated with lack of transparency on either side.

### 3.4. Stakeholder participation and engagement

In some of the MICs, it is hard for the MoH and purchasing agency to manage the processes of stakeholder engagement in the public interest in a transparent way that also balances differing, competing interests. Where broadly representative and transparent mechanisms have not yet developed for government and Parliament to engage with stakeholders and civil society, it is difficult for the health purchaser to develop such mechanisms for its own processes. Transparent stakeholder engagement is very challenging in countries where oligarchic private economic interest groups span multiple sectors including health and are well connected to the political system and/or political party financing. Interviewees noted examples of "state capture" by these interest groups, where health financing policies and purchasing decisions were influenced in ways that undermine universal health coverage. Stakeholder engagement is also more challenging in countries where appointments of managers of the purchasing agency and public hospitals are linked to

political affiliation or political connections. In all countries, it is challenging to prevent non-transparent influence from private interests in the areas of pharmaceuticals, medical supplies, private service providers or health insurance. Lobbying by powerful public institutions or professional/specialist associations based on narrow self-interest also creates a risk of undue influence on policy and an imbalance in resource allocation. In some countries, lobbying by private interests has undermined development of the purchasing agency itself.

Some HIC interviewees spoke of factors that have aided development of more mature stakeholder and civil society engagement, enabling a better balance of competing interests. These factors include the development of more broadly representative bodies, as opposed to single specialty or single disease groups, which are able to finance themselves without relying on health industry funding. The presence of a stronger public health profession, active civil society pressure on the MoH and purchaser to hold them accountable for health sector performance, dominant public and non-profit ownership of health care provision, and fostering of public-good values and courage in the leadership and staffing of the purchaser, has also played a role.

Stakeholders such as employers, labour unions, civil society organizations of beneficiaries are represented on SBs or advisory bodies in six countries. In some, this has been ineffective because beneficiary representatives in particular have been passive, lacking knowledge and experience in governance and so lacking confidence to engage with the agenda. All countries have had to contend with conflict-of-interest challenges, where health care providers or private insurers have been represented on boards or councils. The HICs, and to some extent Ukraine, have had more success with stakeholder participation at board or council level. These countries are able to tap higher-capacity beneficiary and civil society organisations and broader-based provider or professional associations. They have also adopted arrangements to avoid conflict of interest at the level of governance body while engaging health care providers and professionals – and increasingly patient representatives – in consultative and advisory processes, not only at high level but in other processes for policy development and review.

### 3.5. Broader contextual factors

Interviews also explored factors in the broader political, economic and health system context that fostered or impeded purchaser governance and institutional development.

The HICs benefited from higher per capita GDP and health expenditure from the outset of renewed independence and faster economic growth since, underpinned by early broad multisectoral reforms. Health reform was driven forward as part of this. Their successful reforms encompassed public sector governance and management. All this created conducive conditions for stable policy and strategy over the long term and led to a so-called virtuous cycle [6] in institutional development and governance. This benefited the development and governance of health purchasers and strategic purchasing. In Estonia and Lithuania, early decisions to commit to a substantial long term increase in real public expenditure on health through payroll contributions are seen as facilitating virtuous cycles in health purchaser governance and accountability through stable strategy and fiscally credible policy commitments. Latvia's macroeconomic and structural reform progress lagged behind its neighbors, leading to pressure for a second phase of major multisectoral reform following the global financial crisis (2008–2009). This context helped overcome political barriers to making some difficult decisions to progress strategic in the health sector [12].

The MICs in the study, like other MICs in the European region, have all experienced slower economic transformation and institutional reform across multiple sectors, for complex intertwined reasons with pervasive consequences which have been discussed in previous literature [16]. While most country interviews referred to "golden periods" when confluence of conducive conditions and strong health sector and purchaser leadership enabled progress in strategic purchasing, MIC interviewees noted that progress was not sustained and sometimes reversed due to contexts of severe fiscal constraint, major political upheaval or periods of armed conflict. These contexts affected governance and institutional development in multiple ways. Accountability for implementing promised health benefits and paying providers according to contract is undermined by frequent *force majeur* situations, the inability to maintain real public purchasing power and financial protection for health care, delays in release of budget funds to the purchaser and high turnover of ministers, managers, and staff, among other factors.

Countries that experienced prolonged or recurrent political and expert disagreement over health financing architecture and reform, leading to policy and institutional instability, have made slower progress and have been less able to develop governance mechanisms that influence purchaser performance. Health financing policy and institutional instability has occurred in all the MICs except the Republic of Moldova, and to a lesser extent in Latvia, with Georgia being an example of repeated, radical policy reversals. In some of these countries (e.g. Armenia, Azerbaijan and Georgia), interviewees suggested that development agencies and pressure from international financiers may have sought to impose reform before the country had built up adequate domestic political and technical consensus to sustain reform.

## 4. Discussion

The 10-country study adopted an approach that combines two types of governance framework. One is based on exploring whether and why "good practice" governance structures, processes and practices recommended by WHO and other development agencies (such as the World Bank, OECD and the Health Systems Governance Collaborative) for public sector agencies have been effectively adopted and implemented in the study countries. These include clear mandates, oversight bodies, accountability frameworks, merit and performance-based human resource practices, and internal and external audits. The second framework is based on exploring, in relation to these governance structures and practices, what are variously called "domains" or "dimensions" of governance in the literature. These domains/dimensions include accountability, transparency, control of corruption, participation/engagement, and capability. These frameworks guide the "diagnosis" of governance problems, and identification of governance-related solutions or mitigations that have helped in specific country contexts [6,1].

Over the past two to three decades, development agencies and domestic experts have offered technical advice to the 10 countries on "good practice" governance and institution-building for health purchasing agencies. They have also facilitated inter-country learning among these 10 countries, because their commonalities of government and health sector history were expected to make cross-country learning more contextually relevant. While interviewees from most countries perceive this has been helpful and continue to believe implementation of these good practices is the right direction for their countries, there are significant differences in health purchaser governance development between the HIC group and the MIC group, as well as within the MICs group itself.

Our findings suggest "money matters" for good governance, not only via the impact of the health budget on capacity and integrity of the purchaser and governance actors and their ability to plan and implement plans, but also via its impact on the credibility of health coverage policy commitments and the consequent ability of oversight bodies and civil society to hold the purchaser accountable for coverage, access and quality of care.

The governance gap across the 10 health purchasers is loosely correlated with wide differences in WGI scores.The HICs began the reform period with much higher WGI scores across all five governance domains and improved over the last 20 years. On the other hand, the three countries that came latest to reform (Azerbaijan, Ukraine,

Uzbekistan) began the reform period with markedly lower WGI scores than the other MICs across all five domains. Their scores improved over the last 20 years, but not at a pace to achieve convergence. A number of interviewees noted longstanding local cultural and social contextual factors that they perceive to underly some of the differences in their ability to improve governance. These factors include traditions that foster a personalized approach to influence on policy decisions and accountability, which overrides disciplined use of formal frameworks and systems based on rules, criteria and evidence. Among the five MIC purchasers with fully implemented systems and some track record (Armenia, Georgia, Kyrgyzstan, Republic of Moldova, Ukraine), differences and changes over time in WGIs are not all well correlated with health sector or health purchaser governance. Georgia's substantial improvement in WGI scores 2000–2020 seems to reflect for example general improvements in perceived "transactional corruption" but not reflect the persistent deleterious effects of "state capture" noted in the health sector. Additionally, Georgia's improved government effectiveness and regulatory quality WGI scores are not evident in health sector regulation which remains weak or absent. In the case of Ukraine, its government effectiveness in the health purchaser and the key national governance actors for it appears to be markedly ahead of the other MICs, in part likely reflecting much larger country size and range and quantum of specialized human capital – at odds with its lower WGI score.

Our findings suggest that broader public financial management and public administration reform is important for successful governance of the purchasing agency. Ideally, these reforms should be implemented prior to or concurrent with the establishment of the purchaser and the implementation of financing reform policies. In countries where health financing reform preceded these wider reforms and was among the first "new public management" type reforms in the country (e.g. in Kyrgyzstan and Republic of Moldova), it was initially impossible to fully implement financing reforms and related governance reforms as designed. Unreformed systems of prior control of budget execution by detailed input categories remained in place, preventing full pooling of funds and effective use of output-based payment for health care [2]. These systems also prevented a shift of the governance model to one in which the purchaser had greater autonomy *ex ante* and was subject to stronger *ex post* accountability for financial performance, coverage and improvement in results-oriented performance measures. By contrast, Ukraine's more recent health financing reforms benefited from being able to take advantage of pre-existing public finance and public administration reforms, including legal frameworks for arms-length executive agencies.

In the design of corporate governance arrangements for purchasing agencies in the European region, WHO and other international partners have generally recommended giving the purchaser legal, budgetary, technical and operational independence from the MoH, while maintaining the role of the MoH as the lead policy agency for the sector. The study's finding that the least autonomous purchasers (e.g. in Armenia and Georgia) are least able to develop strategic purchasing and establish "virtuous cycles" in governance provides some validation of this advice. International advice given to the 10 countries has varied as to the type of independent agency, lines of accountability and oversight bodies. In the 1990s, a number of the countries were advised to set up highly independent agencies financed by mandatory contributions, operating outside the budget and MoF treasury system, accountable to the government rather than subordinate to the MoH, and with a supervisory board of government, employer and beneficiary stakeholders. Later, most of these countries brought purchasers "on budget" and into the treasury account system, often in response to international advice. With the exception of Estonia and Kyrgyzstan, countries also subordinated their purchasing agencies to the MoH, eliminating SBs or changing their role to a consultative/advisory one. Since the study Kyrgyzstan too decided to subordinate the purchaser to MoH. These changes to governance arrangements were sometimes driven by wider public administration reforms recommended by international agencies (e.g. in Lithuania), but also following power struggles or conflict between the MoH and the purchaser. In worst case, there has been destructive competition within government to control rent seeking from the purchaser's large share of public resources for health.

The experience of these 10 countries highlights the benefit of giving the MoH a clear role in governance of the purchaser, at least once the purchaser has been fully established. In Estonia this is achieved by having the MoH chair the purchaser's SB, in most other countries by making the Minister of Health the primary line of accountability and overseer of the purchaser. It is important to avoid situations like in Kyrgyzstan, where multiple lines of accountability create complications.

While some interviewees perceived that the MoH may have a conflict of interest in purchaser governance and some policy decision-making if it is also the owner of most health facilities, this was seen as a nuanced issue. The process of rationalizing excess public hospital capacity and dealing with "stranded assets" poses significant challenges in these countries, and it unavoidably entails political and stakeholder pressure above the level of the MoH or purchaser.

Most of the 10 countries have considered lessons from Estonia's example of disciplined use of an SB to coordinate and negotiate MoH and MoF goals for health financing and balance some stakeholder perspectives. But from the experience of the MICs in this study, it is not clear that this model would be feasible or appropriate in all MIC country contexts. Boards may be doomed to be bypassed in countries where there is strong personal linkage between the purchaser's CEO and a dominant political actor – Prime Minister or President. Disciplined and transparent board operations may be difficult to achieve and impossible to sustain over time in countries where decisions are usually made more informally, behind closed doors, and where there are no wider public sector policies reinforcing transparency and avoidance of conflict of interest, or where there is a lack of other good examples of governance boards in the public sector (see also [19]).

The study findings support recommendations in previous literature on governance for health purchasers or social HIFs [1,5,9], that effective governance for new health purchasers requires policy consistency and stability and reasonable institutional stability over a long period of time, reflecting the complex and lengthy nature of the changes the reforms seek to bring about in the health service delivery system. The study also found support for recommendations in previous literature for law and regulations governing purchasers to delineate clearly the respective roles and decisions authority of government, MoF, MoH and the purchaser in law and regulation and formalize coherent decision-making processes in regulation and standard operating procedures. Interviewees widely agreed that the extent of autonomy and authority given to the purchaser needed to be aligned with its capacity and accountability and cautioned against granting high levels of autonomy or discretion in country contexts lacking a track record of transparency and control of corruption and rent-seeking in government and its agencies. Even in the countries with the strongest track record in these domains, none of the purchasers has been given decision-making authority over policies such as contribution rates, benefit package, or provider payment methods – decisions affecting rights of citizens and risks faced by providers (predominantly public in 9 of the 10 countries) are reserved to Parliament or Government. Purchaser autonomy is a nuanced matter: "the devil is in the fine-print". The most autonomous purchasers in our study have come to have a major influence on financing policy not only because of decision authorities set out in law but in large part because capacities and decision-making processes have evolved which give them the initiative, make them the main repository of relevant policy expertise, and allow them to formulate policy proposals with a high degree of technical and professional independence.

The study found very nuanced views regarding the common recommendation in previous literature for stakeholder representation in the governing bodies of purchasers and participation in decision-making. The importance of broad and balanced representation and avoidance of conflict of interest on the governance body was

emphasized in our findings, along with an emphasis on the knowledge and experience needed for exercising governance. Stakeholder consultation and seeking consensus among major health sector stakeholders were seen as vital inputs to decision-making, but only when there are institutions and processes for balancing stakeholder input and focusing it on evidence-based options and choices for the greater common good.

The study has limitations in that it does not directly assess the actual quality of purchasing of these agencies, though it documented new purchasing policies and methods implemented by the agencies and investigated how governance influenced adoption, implementation and sustaining of these policies. Therefore, the findings should not be interpreted as an evaluation of the effectiveness of the purchasing practices. Further research should focus on investigating the relationship between good governance and the actual quality of purchasing and impact on health system outcomes. Such follow-up work would provide a more comprehensive understanding of the impact of governance on the effectiveness and efficiency of purchasing processes.

## 5. Conclusions (especially for policy-makers and international audience)

The study has identified some persistent reasons for the difficulties many MICs face in establishing effective governance for their health services purchasers and establishing a "virtuous cycle" of governance improvement. However, the study has also identified some approaches that study countries were able to use to mitigate some of these governance difficulties and foster progress in institutional development and strategic purchasing. Nonetheless, there are some very entrenched and persistent country level barriers to which no sustained solutions have been found among this group of MICs to date, which appear likely to remain difficult until more extensive political, public administration and civil society changes take root.

In MICs where establishing a governance model using a SB, as seen in Estonia, is not feasible, the study has identified alternative options that can help to establish a workable accountability framework. These options include:

- Using external advisory boards with civil society and stakeholder representation to play a role in monitoring the purchasing agency and advocating to protect policy and governance improvements that are made and promote transparency. This type of advisory body can also facilitate more open and balanced stakeholder and civil society engagement with health financing policy and purchasing decisions.
- Leveraging accountability frameworks within reformed public financial management and public administration systems, such as using relevant performance indicators in programme-based budgets for the purchaser and using strategically aligned performance agreements for the purchasing agency and its CEO and staff.
- Using digitized business processes from the outset and developing electronic data collection and open data and using these for key governance-related business processes, such as for automated elements of verification and audit of provider claims; for timely online publication of contracting, expenditure and other data; for analytical reports on performance and for facilitating review and comment by independent agencies including academia and specialized news media.

Even in countries where political, policy and institutional instability are facts of life, beyond health sector influence, our country informants could characterize the conditions that foster periodic windows of opportunity to make progress, even if there are periods of stasis in between. Countries have sometimes found it possible to protect reforms and prevent or mitigate policy reversals even in unstable conditions. In smaller countries, there has been a small but stable group of influential health financing reform "champions" across a range of institutions in the country who have explained and defended the reform model and the purchaser to successive new governments and ministers over many years, also engaging in advocacy to ensure capable, respected purchaser leadership. In larger countries or those with more resources, development of higher capacity civil society organizations or think tanks working in health policy can play a similar role.

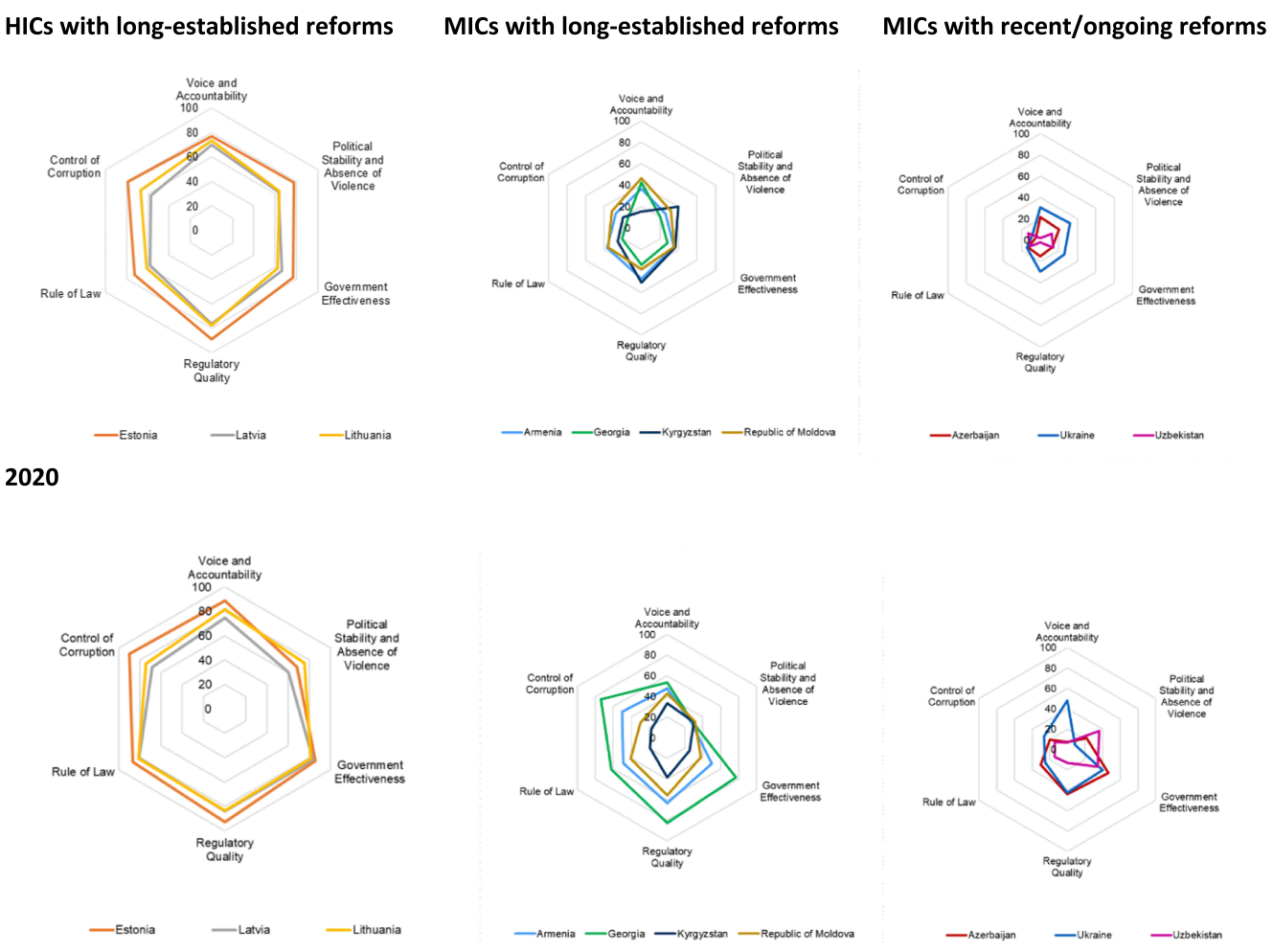
## CRediT authorship contribution statement

**Loraine Hawkins:** Writing – original draft, Methodology, Investigation, Formal analysis. **Kaija Kasekamp:** Writing – review & editing, Visualization, Project administration, Data curation. **Ewout van Ginneken:** Writing – review & editing. **Triin Habicht:** .

## Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

**Appendix 1. World Governance Indicators, 2000 and 2020 (scores out of 100 for each indicator)**




Source: World Bank [15].

**Appendix 2. Key sources of information, key informants and interview guide**

1. Key sources of information

| Source of information | Web-link |
|---|---|
| *Armenia* | |
| Degree on State Health Agency establishment | https://www.arlis.am/DocumentView.aspx?DocID=6381 |
| Degree on transferring State Health Agency under the Ministry of Health | https://www.arlis.am/DocumentView.aspx?DocID=9632 |
| Statute of the State Heath Agency | https://www.arlis.am/DocumentView.aspx?DocID=116681 |
| State Health Agency (webpage) | https://www.moh.am/#1/92 |
| *Azerbaijan* | |
| Law on medical insurance | https://cis-legislation.com/document.fwx?rgn=2725 |
| Statute of the State Agency on Mandatory Health Insurance | https://its.gov.az/uploads/law/10/897284.pdf |
| State Agency on Mandatory Health Insurance (webpage) | https://its.gov.az/ |
| Annual reports of the State Agency on Mandatory Health Insurance | https://its.gov.az/page/hesabatlar |
| *Estonia* | |
| Estonian Health Insurance Fund Act | https://www.riigiteataja.ee/en/eli/ee/505012018001/consolide/current |
| Health insurance act | https://www.riigiteataja.ee/en/eli/ee/520012014001/consolide/current |
| National Health Plan | https://www.sm.ee/et/rahvastiku-tervise-arengukava-2020–2030 |
| Estonian Health Insurance Fund (webpage) | https://www.tervisekassa.ee/ |
| Estonian Health Insurance Fund's annual reports | https://www.tervisekassa.ee/en/organisation/annual-reports-0 |

(*continued on next page*)

(*continued*)

| Source of information | Web-link |
|---|---|
| *Georgia* | |
| Universal Health Care Program | https://www.moh.gov.ge/uploads/files/oldMoh/01_GEO/Kanonmdeblobа/Dadgenileba/N36-2013.pdf |
| *Kyrgyzstan* | |
| Health insurance law | https://foms.kg/uploads/npa/zakon-med-strahovke.pdf |
| The law on single payer system | https://foms.kg/uploads/npa/zakon-o-edinom-platelwike.pdf |
| Mandatory Health Insurance Fund (webpage) | https://foms.kg/ |
| *Lithuania* | |
| Health insurance law | https://www.e-tar.lt/portal/lt/legalAct/TAR.94F6B680E8B8/asr |
| National Health Insurance Fund (webpage) | https://ligoniukasa.lrv.lt |
| *Latvia* | |
| Regulation on National Health Service | https://likumi.lv/ta/id/239184-nacionala-veselibas-dienesta-nolikums |
| National Health Service annual reports | https://www.vmnvd.gov.lv/lv/gada-publiskais-parskats |
| National Health Service (webpage) | https://www.vmnvd.gov.lv |
| *Moldova* | |
| Law on mandatory medical insurance | https://www.law-moldova.com/laws/rom/obeazatelinom-meditsinskom-strahovanii-ro.txt |
| National Health Insurance Company annual reports | https://cnam.md/?page=132& |
| National Health Insurance Company (webpage) | https://cnam.md |
| *Ukraine* | |
| Establishment of the National Health Service of Ukraine | https://zakon.rada.gov.ua/laws/show/1101–2017-%D0%BF#Text |
| The state financial guarantees of medical care for the population | https://zakon.rada.gov.ua/laws/show/2168–19#Text |
| National Health Service of Ukraine annual reports | https://edata.e-health.gov.ua/e-data/zviti |
| National Health Service of Ukraine (webpage) | https://nszu.gov.ua/ |
| *Uzbekistan* | |
| Measures to introduce a new model of organization of the healthcare and mechanisms of state medical insurance in the Syrdarya region | https://lex.uz/ru/docs/5100701 |

2. List of key informants

1. Emma Ghazaryan (National Programme Officer, WHO Country Office in Armenia).
2. Susanna Hayrapetyan (Health Expert, World Bank Group, Armenia).
3. Saro Tsaturyan (Health Systems Expert, Armenia).
4. Zaur Aliyev (Chairman of the State Agency on Mandatory Health Insurance, Azerbaijan).
5. Elvira Anadolu (Senior Health Specialist, World Bank Group Office in Azerbaijan).
6. Tural Gulu (National Professional Officer, WHO Country Office in Azerbaijan).
7. Hannes Danilov (former Director of the Estonian Health Insurance Fund, Estonia).
8. Tarmo Jüristo (Civic Activist, Estonia).
9. Kaija Kasekamp (Former health equity lead in Ministry of Social Affairs, Estonia).
10. Andres Rannamäe (Health Systems Expert, Estonia).
11. Urmas Sule (former Board Member of the Estonian Health Insurance Fund, Chair of the Estonian Hospital Association, Estonia).
12. Nino Moroshkina (Health System Expert, World Bank Group, former Deputy Minister of Health, Georgia).
13. Davit Sergeenko (former Minister of Health, Georgia).
14. Akaki Zoidze (Health System Expert, former Member of the Parliament of Georgia, former Deputy Minister of Health, Georgia).
15. Ainura Ibraimova (Team Lead at the United States Agency for International Development for Cure Tuberculosis project, Kyrgyzstan).
16. Marat Kaliev (Health Financing Expert, former Director of the Mandatory Health Insurance Fund, Kyrgyzstan).
17. Elvira Muratalieva (Senior Programme Officer at Swiss Embassy/Swiss Agency for Development and Cooperation, Kyrgyzstan).
18. Juris Barzdins (former Minister of Health, Latvia).
19. Daiga Behmane (former Director of the Health Payment Centre, Latvia).
20. Uldis Mitenbergs (Head of Country Office, WHO Country Office in Latvia).
21. Maris Taube (former Director of the National Health Service, Latvia).
22. Gediminas Černiauskas (Project Director, Health Economics Centre, Lithuania).
23. Danguolė Jankauskienė (Vice Minister of Health, Lithuania).
24. Gintaras Kacevičius (Director, National Health Insurance Fund, Lithuania).
25. Iuliana Garam (National Professional Officer, WHO Country Office in the Republic of Moldova).
26. Mircea Buga (Health Systems Expert, former Minister of Health, former Minister of Labour, Social Protection and Family, former Director of the National Health Insurance Company, Republic of Moldova).
27. Oxana Domenti (former Member of Parliament in the Republic of Moldova, former President of the Parliamentary Health and Social Security Committee, Republic of Moldova).

28. Valeriu Sava (National Programme Officer for Health, Swiss Cooperation Office Representation of the Embassy of Switzerland, Republic of Moldova).
29. Olga Demeshko (National Professional Officer, WHO Country Office in Ukraine).
30. Alona Goroshko (Health System Expert, Ukraine).
31. Jarno Habicht (WHO Representative and Head of the Country Office in Ukraine).
32. Inna Hartz (Head of the Health Department of the Humanitarian Budget Expenditure Department, Ministry of Finance, Ukraine).
33. Eugeniia Idoiatova (former Acting Director General of the Ministry of Health, Ukraine).

3. Interview guide

**Overall objective**: identify lessons from country experience on governance barriers and enablers in development of health purchasing agencies and strategic purchasing.

The questions address this objective at various levels of the system of governance.

1. **Governance at health system level:**
   a. Who sets strategic policies and strategies for the health sector in general & health purchasing in particular? What has driven or blocked changes in policy and strategy over time? What has been the role of stakeholders and dynamics?
2. **Governance of health purchaser agency:**
   a. autonomy and subordination of the health purchaser agency – reasons and impact of any changes in these arrangements on strategic purchasing;
   b. purchaser's accountability mechanisms for performance; participation of civil society and stakeholders; dynamics over time and main gaps in governance arrangements.
3. **Governance at the wider political and institutional level.** How have wider reforms (PFM, public administration…) – or lack of needed reforms in these areas – helped/hindered development of health purchaser agency and strategic purchasing?
4. **Relationships between purchaser agency and governance actors:** relationships among MoH, MoF and the leadership of health purchaser are important for setting strategic direction and for purchaser accountability. How well has this worked over time? Have the roles and relationships with other Ministries/CabMin/Prime Minister/President also played a role?
5. **Overall perspective:** What have been the most important enablers or barriers to development of the purchaser agency and its ability to purchase strategically? What would be your main points of advice to countries just beginning to establish (or re-organise) purchasing agencies?

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