EXECUTIVE SUMMARY

HONG KONG'S HEALTH SYSTEM IS YET TO BECOME FIT-FOR-PURPOSE

In 2018, Our Hong Kong Foundation (OHKF) published the policy paper Fit for Purpose: A Health System for the 21st Century and recommended system-level transformations that would best equip Hong Kong's health system for meeting 21st century population health challenges. The ability of Hong Kong's longstanding hospital-based, specialist and episodic care-focused health system to overcome current and future challenges in meeting emerging healthcare needs is constrained by structural barriers. These barriers include an underdeveloped primary healthcare (PHC) system, segmented public-private healthcare service delivery and service fragmentation throughout the system. As our population ages, the new "normal" we are already seeing is a growing burden of chronic diseases that continues to exert pressure on health resources and ultimately compromises sustainability. The paper concluded that Hong Kong's health system urgently needs to reorient towards an integrated, person-centred, primary care-led modality to ensure comprehensive and continuous person-centred care for citizens over the life course (Box A). Emphasis was placed upon the importance of pivoting towards care provision in the community that is integrated across different levels of care, coordinated between specialities and providers, and interfaced with social care (OHKF, 2018). Achieving this will provide a system infrastructure to meet the holistic needs of individuals, enhance health system effectiveness and efficiency, and transform Hong Kong's healthcare delivery system into one that aspires to provide "Health for All".

Box A

Key recommendation themes of the *Fit for Purpose:*A Health System for the 21st Century report

Recommendation theme 1.

Enabling person-centred care through reorienting the health system for "the community of persons"

Recommendation theme 2.

Achieving primary care-led integrated care through reorganising how services are delivered to strengthen integration within and between providers and sectors

Recommendation theme 3.

Improving health governance in primary care-led, integrated, and personcentred care through setting up governance levers and structures to support and enable development of new service models

Source: OHKF, 2018

The World Health Organization (WHO)'s "Health for All" goal necessitates the interaction of political will, health sector cooperation, community participation and supporting technology to improve health to a level that enables all people to lead socially rewarding and economically productive lives (WHO, 1988).

> The provision of person-centred integrated care necessitates concerted development of the local health system through an evaluation of current gaps in the provision and mix of different service types and the leveraging of mechanisms for how these could be better provided and/ or bridged. Governance leadership will be important to achieve strategic integration throughout the system, engaging with a shared vision and supported by clear strategic goals set based on population health needs and service delivery assessment. Enabling policies, strategic purchasing and commissioning mechanisms together with enhanced workforce planning to ensure the appropriate education and professional development required for the right mix and competencies of healthcare professionals is also necessary.

Health system planning and policy formulation in Hong Kong has taken initial strides at improving coordination to realise person-centred integrated care, where the investment of resources is not only on hospital and specialist care, but also on building a communitycentric PHC ecosystem. In recent years, the Hong Kong SAR Government (HKSARG, or referred to as the Government) has committed to transforming Hong Kong's treatmentoriented health system into one that is prevention-focused to meet emerging population health needs and has placed heavy emphasis on PHC development. The gradual territory-wide rollout of District Health Centres (DHCs) and the mapping of a PHC blueprint which is anticipated to be presented for public consultation in the upcoming months (at the time of writing) showcase nascent efforts to propel PHC development in Hong Kong.

Policymaking for integrated care, however, is not an exclusive domain of government, but instead necessitates cross-sector and multidisciplinary coordination. Joint planning with key stakeholders across sectors and at different levels of the health system, which includes goal setting, strategic planning and collective decision making, is necessary for achieving health system goals. Especially in tackling segmentation between the public and private healthcare systems in Hong Kong, identified service gaps should be bridged within and between the public and private sectors. This involves the delineation of a strategic and complementary role for the private sector in the design of a better integrated system.

While past policy plans have emphasised the need to better leverage the private sector to play a complementary role in achieving health system aims, despite the many public-private partnership (PPP) (Box B) initiatives, the public and private sectors continue to be segmented in terms of service provision and underlying financing mechanisms. As a result, the supply of public healthcare services still does not meet population demands arising from emerging healthcare needs for the prevention and management of chronic health conditions that necessitates integrated care, particularly at the primary care level. In contrast with the private sector which provides the bulk of primary care services (approximately 70%), primary care provision in the public sector is constrained. Primary care services thus predominantly necessitate out-of-pocket payments (OOPs) and remain unaffordable to vulnerable populations and the less well-off. Without better leveraging private sector capacity while improving primary care accessibility, Hong Kong's health financing system may contribute to further health system fragmentation.



Universal health coverage (UHC) is defined by the WHO as "all people [having] access to the health services they need, when and where they need them, without financial hardship." (WHO, n.d.)

Evidently, providing accessible, affordable and well-integrated primary care that is personcentred to meet emerging population health needs and in alignment with the goals of universal health coverage (UHC) remain continuous challenges that must be addressed in Hong Kong. To overcome these challenges, selecting the right policy tools and levers is key to successful system transformation to realise set system goals. Financing mechanisms have been recognised as a key policy lever to implement system-wide reforms that must be aligned with service delivery goals to facilitate **system change.** In progressing towards the provision of person-centred integrated healthcare, health systems around the world have implemented different financing mechanisms, such as strategic purchasing and commissioning, and payment tools including capitation and performance-based payment schemes which consider service provider incentives and accountability, that are context-specific to meet the unique needs of different health systems.

Amongst the various health financing strategies and reforms proposed in past decades, Hong Kong has used PPPs as a purchasing instrument to better leverage existing resources from both sectors to provide care that meets population demands. Many of the PPP initiatives have been positioned to tackle pressing demand, are modest in scope and disease-focused. Focus has also been placed on disease prevention and primary care. Those aimed to promote primary care uptake, such as the General Outpatient Clinic-PPP (GOPC-PPP) and the Elderly Health Care Voucher Scheme (EHCVS), have been implemented as specific programmes and not designed from a systems perspective, and without the critical emphasis on care integration, they have shown varying degrees of success in actualising programme goals let alone system goals. Lessons learned from the plethora of well-intended pilot programmes, one-off projects, and prior consultations for achieving person-centred integrated care must be leveraged and successful programmes should be scaled-up in a strategic and coordinated manner. Promoting better care integration calls for a more strategic approach to commissioning care in the public sector and purchasing care from the private sector to better cater for total population needs.

In parallel to the building of a primary care ecosystem in the public sector that will take time and moving beyond injecting additional funds into the health budget, it is our view that available resources within our current portfolio must be allocated more strategically and be directed towards prioritised primary care services. Strategic purchasing will be a critical lever in health system governance and health service planning to achieve this through enabling better allocation and utilisation of resources to meet population needs, and the appropriate recalibration of the public-private mix to improve healthcare delivery effectiveness and efficiency (Box B). Careful planning and implementation of purchasing initiatives that apply strategic purchasing can facilitate system integration. The strategic purchasing concept can be applied not just to facilitate the design of specific healthcare programmes, but also as a critical system-level policy lever for transforming the health system into one that is primary care-led, integrated and person-centred. As such, decisions in strategic purchasing must become an integral function of health system governance, aligned with the strategic goals and considered in the context of the interconnected objectives of macro, meso and micro-levels of the health system (Box C).

And so, taking a system perspective, we demonstrated the application of strategic purchasing to primary care services that align with system-wide efforts to tackle a key population health challenge, namely the growing burden of chronic conditions. We also explored the potential for leveraging capacity of the private sector through PPPs as a purchasing instrument for integrated products of partnership between the public and private healthcare systems. We anticipate our demonstration to provide insights for further applications of strategic purchasing in tackling key health system gaps and combatting health system inefficiencies. Finally, looking beyond our specific application of strategic purchasing to primary care services, we put forward a framework on health systems strategic purchasing that positions this mechanism as a key policy lever for the transformation of Hong Kong's health system to become truly fit-for-purpose.

Box B

Definition of "Public-Private Partnership"

Public-private partnership (PPP) is defined as "an agreement between the government and one or more private partners (which may include the operators and the financers), according to which the private partners deliver the service in such a manner that the service delivery objectives of the government are aligned with the profit objectives of the private partners and where the effectiveness of the alignment depends on a sufficient transfer of risk to the private partners."

Positioned as a purchasing instrument, PPPs are split into two major modes: supply-side financing (incentives and payment guarantees), as well as demand-side financing (financial assistance and incentives to individuals). In Hong Kong, purchasing often takes the form of PPPs, although the development of these initiatives is yet to be governed by a systematic tool and are not implemented in accordance with strategic purchasing principles. Coupled with the need to overcome compartmentalisation of funding, purchasing and service delivery throughout the local health system, Hong Kong needs to consider a more strategic way of purchasing that will propel the provision of integrated care and help the system achieve set strategic goals.

Sources: Bowser et al., 2016; OECD, 2008

Definition of "Strategic Purchasing"

Strategic purchasing was discussed in OHKF's 2018 policy paper as an effective financing lever that can inform the allocation of resources throughout the health system, leading to a more cost-effective provision of healthcare services whilst maximising population health (OHKF, 2018). It is **an iterative process** also known as "active purchasing", cyclical in nature involving needs assessment, planning and monitoring, and consistently evaluated in a system-wide manner characteristic of the active process. Recognised by the WHO as an effective financing lever in achieving UHC, the strategic purchasing process entails six core decisions to be made for implementation, including "whether to **provide or purchase**", "**who** to purchase the targeted services", "**for whom** to purchase services", and "**how** to purchase" that is considered across macro-, meso- and micro- levels of the health system.



Strategic Purchasing Decisions

Whether to provide or purchase	The Government should decide whether it would provide health services themselves or purchase services from other provider organisations.
Who to purchase	The Government should identify an appropriate purchaser that is equipped to focus on the type and level of health services of interest and define its role in the health system.
For whom to purchase	When designing a strategic purchasing-oriented programme, the purchaser should identify a target group with needs that would benefit from the purchasing programme.
What to purchase	The Government should assess what service gaps exist in the health system and which health goals may be met through the services purchased.
From whom to purchase	The purchaser should carefully select service providers based on their capacity, availability, accessibility, and the appropriateness of the services they provide relative to the population health goals set out by the Government.
How to purchase	To draw participation in the purchasing programme, the purchaser should utilise demand-side and supply-side instruments, contractual terms and agreements, and provider payment mechanisms that effectively incentivise providers to meet system health goals.

Source: WHO, 2000

METHODOLOGY

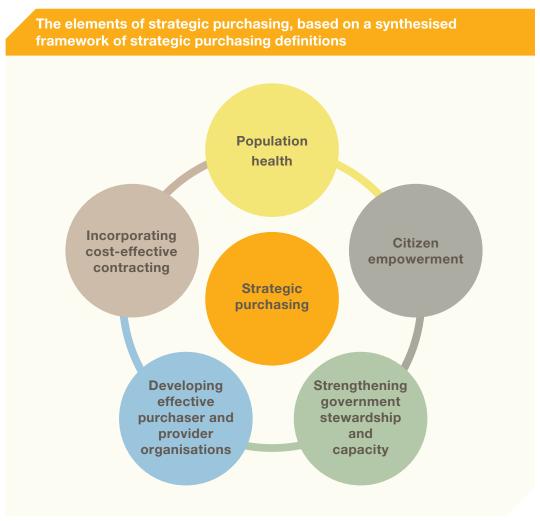
This report builds on the research presented in our previous policy paper and is integral to ongoing advocacy to transform Hong Kong's health system into a primary care-led, integrated, person-centred health system. In this report, OHKF together with Professor Yeoh Eng-kiong and his team in the Centre for Health Systems and Policy Research of The Jockey Club School of Public Health and Primary Care, Faculty of Medicine, the Chinese University of Hong Kong investigates how to strategically organise our health financing system to align with system goals and meet population demands for enhanced accessibility and affordability of well-integrated primary care.

Our research began with an extensive study of the literature and institutional reports in latest health financing trends globally and locally. In this report, we present insights on best practices and lessons learned from international experience on the application of strategic purchasing for chronic disease prevention and management. We also identify challenges and gaps within Hong Kong's health financing structure and analyse how capacity in the private sector can be better leveraged for primary care provision through PPPs in Hong Kong. With these insights, we assessed the feasibility of a **Chronic Disease Screening Voucher and Management Scheme** (CDSVMS, also addressed as "Scheme") for three targeted chronic conditions, namely hypertension, hyperglycaemia (diabetes), and hyperlipidaemia (collectively termed "HDH") designed based on lessons from the implementation of existing PPPs, as well as the perspectives gained from key stakeholders through interviews, and from citizens through a population-based telephone survey. We also projected the economic impact of this Scheme for Diabetes Mellitus (DM) on the health system over the course of 30 years for individuals aged 45 to 54 years of age at the start of the scheme using a Budget Impact Analysis.

To better inform the application of strategic purchasing, we highlight policy dimensions that should be accounted for in the formulation and implementation of programmes enhanced using strategic purchasing. To illustrate, we apply a synthesised framework of strategic purchasing consisting five key components of consideration to our proposed Scheme (Klasa et al., 2018). The considerations analysed include **population health, citizen empowerment, strengthening government stewardship and capacity, developing effective purchaser and provider organisations, and incorporating cost-effective contracting (Figure A)**.

Our study received funding support from the Public Policy Research Funding Scheme offered by the Policy Innovation and Co-ordination Office of the Government of the Hong Kong Special Administrative Region (Project number: **2020.A4.068.20B**).

Figure A



Source: Klasa et al., 2018

APPLYING STRATEGIC PURCHASING TO ENABLE A FIT-FOR-PURPOSE HEALTH SYSTEM IN HONG KONG

Achieving the vision of a fit-for-purpose health system necessitates a massive, complex, and continuous transformation of our health system and health financing structure, for which strategic purchasing is a critical and currently underutilised mechanism. Consideration needs to go into how to apply strategic purchasing to enhance programmes strategically designed to meet health system goals and population needs. Along the way, decisions need to be made on which programmes to apply strategic purchasing and how to link up programmes to promote better integrated care.

Acknowledging the many policy actions underway to promote PHC development in Hong Kong, this report leverages this momentum and proposes a **localised strategy specific to our pluralistic health system to promote innovative, effective and equitable financing of healthcare**, with a primary aim of accelerating PHC development. We present policy recommendations informed by strategic purchasing principles that seek to move Hong Kong closer towards achieving a health system which provides well-integrated primary care that is person-centred to meet population health needs.

RECOMMENDATION 1. Hong Kong should apply strategic purchasing and leverage public-private partnerships as a purchasing instrument with a strategic vision for improving primary care accessibility in Hong Kong

Mechanisms for strategic purchasing should be an integral function of health system governance in the planning process of the commissioning and purchasing of healthcare. The application of strategic purchasing for enhancing primary care accessibility necessitates these mechanisms to be aligned with strategic goals and operated across macro-, meso-and micro- levels of the health system.

- What services to purchase? The Government should identify service gaps in the health system and health goals that may be met through primary care services purchased. It is critical to conduct population needs assessments and evaluations of health goal prioritisation on a continuous and regular basis.
- Whether to provide or purchase? In parallel to the building of a primary care ecosystem in the public sector that will take time, resources within our current portfolio must be allocated more strategically to facilitate the purchase of prioritised primary care services. Given that the private sector currently provides the bulk of primary care services in Hong Kong, there is a need to better utilise private sector capacity in primary care provision. While Hong Kong has used PPPs as a purchasing instrument to better leverage existing resources from both sectors to provide care that meets population demands, a more strategic approach which assesses the capacities and capabilities of private and public sector providers in making decisions for incorporating strategic purchasing mechanisms is necessary to guide the purchase of care from the private sector to enhance the accessibility and affordability of primary care for all.
- For whom to purchase? Programmes applying strategic purchasing should aim to improve equitable health outcomes for all population groups through extending health service (in this case, primary care) coverage, improving public access and financial protection, advancing social equity while optimising health system efficiency using defined or whole population targeting (WHO, 2017b). At the same time, the targeted population should be well-informed of their entitlements.
- From whom to purchase? When selecting providers, purchasers should ensure that provider operations are well-managed with clear service contracts. Regarding the actual selection of service providers, capacity, availability, quality, efficiency, and equity of service providers must be considered within the context of service accessibility to encourage uptake. Efforts should be made to incentivise the participation of service providers. The Government should involve cross-disciplinary service providers to promote holistic person-centred care.
- Who to purchase? Purchasers of health services can be chosen from both the public and private sectors (WHO, 2019b). All purchasers should work in synergy towards the same set of health system priorities, using mechanisms that facilitate knowledgesharing between different purchasers. The Government should identify a purchaser responsible for the provision of primary care in Hong Kong such as the Food & Health Bureau, and clearly define its role.
- How to purchase? The Government and purchaser should assess how services will be purchased and at what price, using a selection of demand- or supply-side instruments, contractual terms and agreements, and provider payment mechanisms that incentivise performance. Thought should therefore be given to how best to integrate performance-based financing (PBF) programmes into mixed provider payments systems to bridge gaps between providers and purchaser expectations, and incentivise change among providers for improving access and quality of services (WHO, 2017b).



Our population-based telephone survey showed that 75.3% of respondents were willing to join the Scheme.

Economic analysis suggests that the health system will spend approximately 28% less on direct healthcare expenses over 30 years upon the implementation of a screening voucher and management scheme for diabetes.

RECOMMENDATION 2. Hong Kong should introduce a Chronic Disease Screening Voucher and Management Scheme to enhance primary care accessibility

As an illustration of the application of strategic purchasing in the Hong Kong context, we propose the introduction of a scheme that targets chronic disease prevention and management and leverages private sector capacity. By focusing on early detection of disease through screening and well-thought-out management services in community settings, the Scheme is designed to alleviate pressure on public hospitals and curb healthcare costs associated with preventable chronic disease complications. Our demonstration hopes to pave way for the discussion of the strategic purchasing lever as part of a whole health system approach in maximising health system performance by better strategically prioritising what services to purchase, who should purchase, for whom, from whom, and how.

 What services to purchase? We propose that HDH screening, re-screening, and follow-up management services and associated medications in the private sector, as well as management services for adults diagnosed with conditions co-morbid with HDH in the private sector to be purchased. To facilitate access and incentivise participation in screening, we recommend that the Scheme fully subsidises all screening services, including future rescreening.

To prevent and/or delay the onset of chronic conditions, and prevent the development of complications, we further recommend differentiating the treatment and re-screening plans for patients identified to have different risk levels. Among patients who have been diagnosed with HDH, we recommend the use of the Risk Assessment Management Programme (RAMP) risk-level assessment for the formulation of a personalised care plan with the potential of care subsidisation for chronic disease management. In our analysis on the impact of the Scheme for DM only, the annual cost to the system associated with the management of patients diagnosed with DM without complications and necessitate basic outpatient follow-up care (such as medication refills, lifestyle modification consultations) has been projected to range from HKD 5,950 to HKD 15,383 per patient per year on average, depending on age group (with higher costs in older age groups) (Jiao et al., 2017). While screening services in our Scheme are without cost to the end-user, the Government needs to study the potential to subsidise or create a co-payment schedule for populations that face financial difficulties to support chronic disease management, for instance those with an income below 60% of the Median Monthly Domestic Household Income. The projected cost for chronic disease management of diagnosed patients with comorbidities associated with DM and related complications that necessitate inpatient care stands at HKD 123,364 per patient per year in direct costs to the health system (according to our suggested care protocol, these patients will be referred to public hospitals for follow-up management) (Jiao et al., 2018).

We recommend that the purchaser also consider purchasing **follow-up consultations with family doctors on lifestyle modification for users who are not diagnosed with HDH** and referrals to re-screening. Our cost projections assume that patients without diagnosed HDH may benefit from a HKD 350 subsidy, to match the approximate cost of one GOPC-PPP consultation, towards obtaining a follow-up consultation with their chosen private sector family doctor.

- For whom to purchase? HDH screening services in the proposed Scheme should initially
 be targeted at adults in the 45–54 age group at the beginning of the
 Scheme to promote earlier detection and necessary intervention for prevalent chronic
 conditions.
- From whom to purchase? The screening and management services to be purchased are
 proposed to be administered by primary care service providers in the private
 sector, including family physicians and allied health professionals, in conjunction with the
 District Health Centres.
- Who to purchase? The Government should identify a central purchaser for primary care services and clearly define its role as a purchaser.
- How to purchase? The Scheme will deploy a hybrid-model comprised of a fully subsidised voucher as a demand-side instrument, with financial flexibility for co-payment determined by the purchaser as well as performance-based payment to providers for management services as a supply-side instrument.

Economic analysis suggests that the health system will prevent a total of **47,138 mortalities** over the course of 30 years if it implements a screening voucher scheme and management for diabetes.

RECOMMENDATION 3. The Government must consider key policy dimensions to ensure effective application of strategic purchasing

Key stakeholders of Hong Kong's health system in our interviews unequivocally welcome the launch of the Scheme but stressed the need for comprehensive policy, planning, and regulation of participating providers, and of addressing implementation barriers that exist in the health system. The importance of a well-designed management scheme for desirable results was also emphasised. With these insights, we recommend that the Government take into consideration the five key components of a synthesised framework of strategic purchasing as elaborated below when designing and implementing the Scheme.

3.1 Population health

Identifying population health needs and incorporating them into the purchasing process is a core element in strategic purchasing decisions. To ensure that policy decisions related to the Scheme are based on the latest population health data, **the Government should better information-sharing systems and systematise the tracking of PHC expenditure using international standards.**

The Government should better leverage and strengthen existing infrastructure, such as the Electronic Health Record Sharing System (eHRSS) to better track population health needs. To integrate data into purchasing decisions, we suggest that the Government systematise and regularise tracking of Hong Kong's PHC expenditure using international measurement standards, specifically by fully adopting the System of Health Accounts (SHA) (for more details, please refer to **Chapter 3**).

3.2 Citizen empowerment

The strategic purchasing framework advocates that government and purchasers should ensure that citizens' and patients' values, views, and choices are accounted for. Citizens should be allowed input on their benefit package, their choice of provider, and ability to hold purchasers and providers accountable for services offered. Therefore, new programmes need to consider the most relevant needs of citizens that should be solicited from the adoption of a citizen-participatory design process. At the same time, purchasers' accountability should be strengthened to enhance citizen and patient empowerment.

As an example, screening programmes are more likely to be more successful if no co-payments are involved. And so, we propose the screening voucher to fully subsidise all initial screening and re-screening services while co-payments for management could be considered based on users' capacity and willingness-to-pay (WTP). Our population-based survey results suggest that the WTP for managing chronic conditions ranges from HKD 51 to HKD 200 per consultation, with lower monthly household income being significantly associated with lower WTP ranges. This phenomenon should be considered in the programme design process where the Government can involve patients in devising a co-payment schedule for disease management.

3.3 Strengthening government stewardship and capacity

To build an effective strategic purchasing system, the regulation and monitoring of purchasers and providers to ensure that they are meeting agreed objectives is key. Health systems should adopt an integrated framework that defines explicit contractual terms, and government capacity to monitor, evaluate and ensure purchasing arrangements are enabling achievement of health system goals. To achieve this, **the Government's capacity to monitor the performance of primary care PPP providers must be enhanced in a regulatory framework.** At the same time, the Government needs to **identify a purchaser whose role in purchasing and payment of services is clearly delineated and defined.**

The ability to centralise policies in favour of systemic decision-making by a purchaser proves critical in the strategic purchasing process applied to the implementation of the proposed Scheme. We recommend that **the purchaser ensures coordination between existing and future PPPs to advance health system goals, regularly releases public reports on the expenditures and performance of existing PPP programmes, as well as of the Scheme upon its implementation.**

3.4 Developing effective purchaser and provider organisations

Continuous shifts in needs, demands, funding priorities, treatment options, medicines, and individual and provider behaviours need to be anticipated in the strategic purchasing process. This necessitates strategic purchasing agencies to respond to changing contexts and dynamics of the health system promptly and appropriately to manage the alignment and dynamics of various changing factors. The expectations for each participating stakeholder and alignment with health system goals should be made explicit.

As an example, the Government should assess and enhance the capacity and capability of the health system to match the new service demands generated by the Scheme and ensure that there is alignment between the purchaser, providers, and multiple stakeholders. As increased screening demand and need for chronic disease management will create additional strain on the health system, we recommend the purchaser to conduct a pre-implementation assessment of private sector capacity to better inform the design of care guidelines, sufficient levels of incentives, and referral protocols that are aligned between participating stakeholders. On the

same note, our key stakeholder interview findings also revealed the importance of collaborating and gaining input from various industries in the Scheme's design for desirable results. Based on our findings, we recommend that the stakeholders with whom alignment should be ensured include the pharmaceutical industry, insurance industry, and existing primary care providers in the public sector such as DHCs, and integration of the Scheme with existing programmes such as the EHCVS should be ensured.

3.5 Incorporating cost-effective contracting

Policy clarity and definition of the contracting process (specifically, the payment system and financing mechanism between purchasers and providers) is a key component of strategic purchasing. "Good contracting" will have clearly stated terms and criteria, as well as measurements of its effectiveness, that are based on evidence, premised on the availability of a health system's data on health status, health needs of its populations, and the efficiency of existing health programmes and service models. Provider payment systems should be aligned with benefit package design with consideration to **the transfer of risk** from the purchaser to service providers while maintaining communication between both parties and with patients.

To facilitate cost-effective contracting in PPP programmes, **supply-side and demand-side factors** need to be strategically addressed to promote PPP participation of providers and users. Identified barriers that deter participation need to be addressed and incentives to encourage participation considered. For instance, to maximise provider participation, the Government and purchaser should work towards **streamlining administrative requirements and disseminate clear guidelines and information on the payment mechanism to service providers.**

In relation to transfer of risk from the purchaser to service providers, we recommend the implementation of a management Scheme for HDH in the private sector for diagnosed HDH patients, modelling off the RAMP programme currently implemented in the public sector. The parallel RAMP protocol and programme should have in place defined risk-sharing arrangements between the public and private sectors. For instance, patients should be able to attend their RAMP programme in the private sector as they need, but if their conditions worsen and they require acute hospital inpatient services, patients should be referred to public hospitals. This will require the development of clinical guidelines and protocols. This sharing of risk perceivably helps to incentivise private sector providers to partake in the Scheme and simultaneously help manage the increasing healthcare demand on the public sector.

At the same time, clear guidelines on payment to providers should be disseminated, and the attainment of a quality standard be made a determining factor of contract renewal. Common clinical protocols, shared staff training and development programmes between the public and private sectors could also be considered.

RECOMMENDATION 4. Health system strategic purchasing should be implemented for achieving an integrated care system to enable health for all

Beyond application to specific healthcare programmes, strategic purchasing should also be positioned as a key policy lever for health system transformation towards one that is primary care-led, integrated and person-centred. This involves relevant decisions for strategic purchasing to be considered, including interconnected objectives and goals together with an aligned accountability structure across all three levels of the health system that include macro- (health system), meso- (healthcare delivery) purchaser-provider system, and micro- (person journey of healthcare delivery) levels (Figure B) (WHO, 2012).

Figure B

Health system strategic purchasing: the application of strategic purchasing across macro-, meso- and micro- levels of the health system

Macro-level: Health system strategic purchasing

Governance

- Assessment of population health needs and equitable access to integrated care
- Healthcare delivery evaluation
- Policy instrument choice
- Make or buy
- Strategic resource allocation to commissioners and purchasing agents

Policy parameters

- Health system objective & policy goals
- Who to purchase
- From whom to purchase
- Contracting/ commissioning
- Policy guidance and authorisation for purchasers on purchasing decisions

Collaboration

- Engagement/ Participation/ Communication
- Feedback and timely response
- Credibility/trust

Oversight & Accountability

- Selective contracting
- Licensing and accreditation
- Monitoring and evaluation
- Reviewing and auditing



Meso-level: Healthcare delivery purchaser-provider system

Purchasing, Commissioning and Provider System

- Roles, authority, and obligations of purchasers, commissioners and providers
- Engagement with governance to align functions
- Structure for communication and collaboration with health and community stakeholders

Integration of health services

- Mix, types, settings, and providers of care
- Networking of services and agreements on resource deployment
- Bridging mechanisms and structures for care transitions

Systems for coordination

- Care pathways
- Clinical protocols
- Multidisciplinary engagement
- Clustering of primary and specialist services for vertical integration
- Networking of service types for horizontal integration

Monitoring for results

- Review of process
- Monitoring and evaluation of access, safety, quality assurance, and audit systems
- Patient complaints, redress, and feedback systems
- Patient satisfaction and reported outcomes surveys



Micro-level: Person journey of healthcare delivery

Integrated care

- Timely access to preventive, curative, rehabilitative, palliative and social care
- Multidisciplinary engaged teams
- Clinical protocols
- Service navigation systems
- Provider transition review
- Affordability and equitable access to care

Person centredness

- Redesign of care process around patients
- Protocols for engagement in decisions
- Culture for care to be appropriate to the needs and preferences of each person
- Performance incentives for person centredness

Holistic care

- Monitoring of care processes
- Assessing access, affordability and continuity of care
- Review of patient journey and experience
- Evaluating interventions for co-production of health

Source: WHO, 2012

4.1 Macro-level: Health system strategic purchasing

Strategic planning and the formulation of strategic goals of a health system should be informed by a **population health needs assessment** in conjunction with evaluation of the **healthcare delivery system** as part of health system **governance**. This includes the identification of gaps in healthcare service provision, and the evaluation of the capacity and capability of public and private providers. This information should be captured by information systems to inform purchasing decisions while the system governance structure will inform decisions on who the purchasing agent should be.

Appropriate **policy instruments** are also needed to enable the implementation of strategic plans, programmes and purchasing that will include the creation of resources, regulations and legal instruments. It will be necessary to analyse the authority delegated to budget holders for the allocation of resources and uphold their accountability for the impact of the disbursement of resources. Policy parameters for purchasing agents for the service mix and types, and the configuration arrangements needed to enable integrated care will need to be defined. These include consensus between the governance and provider levels on what to purchase, from whom and how to purchase, as well as the choice of purchasing instruments and payment mechanisms.

Transformation for an integrated health system is exceedingly complex and necessitates a shared vision and **collaboration between a multitude of stakeholders** in the health sector, business sector, and civil society. Structures and mechanisms for engagement, participation, and communication at every stage of policy formulation, implementation and evaluation is required. Feedback and timely response will be necessary. A system for **oversight and accountability** of the decisions made by purchasing agents will need to be created. A framework for the monitoring of functions, review of progress, and evaluation of performance and objectives, and information systems will be needed.

4.2 Meso-level: Healthcare delivery purchaser-provider system

At this level, strategic purchasing should be focused on **health service delivery and provider organisation.** The roles, authority and obligations of providers, purchasers and commissioners must be clearly defined. Consideration is given to the types, range, and mix of care for the defined community based on healthcare needs, and on the **integration of related services**, which will require community input. This level puts focus also on the mechanisms for engagement, coordination and management of local actors, service providers and health workers. **Systems for coordination** between these parties to meet system goals are necessary and are facilitated by care pathways, clinical protocols and multidisciplinary engagement that facilitate both vertical and horizontal integration of care. **Monitoring of results** is essential and should include process review, performance monitoring, and consideration of patient feedback.

4.3 Micro-level: Person journey of healthcare delivery

The micro-level considers a person's healthcare journey during the life course that involves encounters with multiple disciplines of healthcare professionals from different specialties, in different settings, and at different levels of health service provision.

The final product of strategic purchasing must consider the person journey of healthcare delivery such that the model of patient care is designed to **centre on the individual** and enable **a seamless journey in care delivery across preventive, curative, rehabilitative, palliative, and social care** provided by multidisciplinary teams of healthcare professionals. Bridging and coordinating mechanisms also need to be considered in the purchasing process to enable **vertical** (care transition within and between primary, secondary, and tertiary levels of care) and **horizontal** (care transition between different specialties of care; between social and medical care; and transitions to and from community settings) **care integration**.

To promote holistic person-centred care that is integrated across the life course, purchasing instruments such as capitation payment and personal health budget allocations that necessitate dynamic evaluation and adjustment should be considered. Purchasing contracts and agreements should build in clauses that incentivise performance promoting personcentred care. Monitoring and evaluation tools need to consider patient care experience, satisfaction and patient-reported outcomes. Patient feedback systems should be in place and considered in the performance monitoring process.

Strategic purchasing is a key health system policy tool that will enable individuals to experience holistic person-centred care throughout an integrated care journey over the life course. It will thus be important for the strategic purchasing process to incorporate **a bottom-up perspective** that accounts for the needs and wants of system end-users that in turn, should act to link the micro-, meso- and macro- health system levels for the delivery of person-centred integrated care.

CONCLUSION

Our 2018 policy paper *Fit for Purpose: A Health System for the 21st Century* recommended system-level transformations that would best equip Hong Kong's health system for meeting 21st century population health challenges. In moving towards the visionary health system presented in our paper that is primary care-led, integrated and person-centred, we highlighted that "strategically purchasing services, allocating resources appropriately and utilising purchasing and payment mechanisms can enable coordination and integration between service providers."

The present report elaborates on strategic purchasing and puts forward that beyond facilitating the design of specific healthcare programmes, strategic purchasing serves as a critical policy lever for health system transformation to achieve a person-centred, integrated care system. We presented a framework that illustrates how the decisions in strategic purchasing should be considered in the context of the interconnected objectives and goals at all three levels of the health system, including macro- (health system), meso- (healthcare delivery purchaser-provider system), and micro- (person journey of healthcare delivery) levels to achieve better integration across preventive, curative, rehabilitative, palliative and social care provided by multidisciplinary teams.

This report also showcases a specific application of strategic purchasing for better integrated primary care in Hong Kong's pluralistic health system to meet system goals and population needs. We demonstrated the application of strategic purchasing to primary care services that align with system-wide efforts to tackle a key population health challenge, namely the growing burden of chronic conditions. We also explored the potential for leveraging capacity of the private sector through PPPs as a purchasing instrument for integrated products of partnership between the public and private healthcare systems. Specifically, we evaluated the feasibility of a proposed **Chronic Disease Screening Voucher and Management Scheme** designed based on strategic purchasing criteria that will enhance accessibility of both chronic disease screening and management, incentivise the uptake of primary care services in a targeted manner, and leverage private sector capacity to complement the public sector.

Designed to promote the prevention and early intervention of hypertension, hyperlipidaemia, hyperglycaemia in an increasingly high-risk but currently underserved population (targeted age group: 45 to 54 years), we conclude that the Scheme is particularly novel and innovative against a backdrop of a myriad of PPPs in Hong Kong. The Scheme stands out as a promising programme in consideration of its targeted design with a strong focus on prevention, wherein all eligible individuals within the targeted demographic can join. Additionally, its design as a hybrid (both demand-side and supply-side financing) purchasing model that draws upon the analysis of limitations in existing PPPs will ensure that the care provided is holistic, facilitates continuity of care, and are of high transparency, quality, and accountability. Finally, the Scheme is positioned in line with the latest government policy agenda and initiatives in PHC development. Our demonstration illustrates how applying strategic purchasing at a systems level can potentially contribute to significant cost savings for the health system and ultimately, promote system sustainability.

As the Government continues its momentum in building a solid primary care ecosystem for Hong Kong, relevant authorities need to consider how the proposed Scheme can be implemented. Importantly, the Government needs to consider the adoption of health system strategic purchasing in tackling key health system gaps, combatting health system inefficiencies and achieving a person-centred integrated care system that is necessary for Hong Kong's health system to become fit-for-purpose.