Improving the quality of care for patients with chronic conditions is central to advancing universal health coverage (UHC), given the large burden of premature mortality from noncommunicable diseases. Policy-makers have invested in a wide range of initiatives to address the gaps in receiving the recommended quality care. Countries at different income levels have introduced changes in purchasing and payment arrangements to shift from an activity-based approach to those incorporating measurements of quality and performance. Such methods range from payments made for providing quality care to more complex arrangements that link payments with coordinated patient management. Each method has advantages and disadvantages and creates financial incentives that align to varying extents with quality and health goals.

The objective of this research study is to describe experiences with different purchasing arrangements and payment methods and how these have been used to attain quality care and better health outcomes for patients with chronic conditions. First, we reviewed evidence from rigorous studies across different settings about payment methods and their effects on health care quality and outcomes for patients with chronic conditions. Such evaluations found weak associations with process quality and outcomes related to chronic care.

We then reviewed eight case studies, from Australia, Canada, Chile, China, Germany, Indonesia, South Africa and Spain. These studies were commissioned to provide a better understanding of the designs of different purchasing arrangements that aim to promote quality in chronic disease care. They include examples of blended payment arrangements and population-based payment methods and were, in most cases, accompanied by other service delivery interventions, with the intention of providing incentives to deliver services in a better way. A mix of
process and outcome measures was used in all studies, with a reliance on information collected by existing administrative systems. A challenge in most settings was to balance the incentives in blended payment methods, i.e. a combination of two or more payment methods. Very little information was available about how decisions were made in distributing payments, which may create uncertainty for providers. For two schemes that were evaluated, important methodological challenges include selection bias. Key facilitating and inhibiting factors of the interventions included those related to governance, service delivery, quality standards, health information infrastructure, as well as the financial and regulatory environments.

There remains strong interest among all stakeholders to better understand how to implement an optimal mix of different methods of provider payment that supports the goals of better quality and health. This research study has generated lessons for countries interested in improving purchasing and payment arrangements to work towards providing better-quality care for chronic diseases.

A stronger focus on health care delivery models and systematically identifying obstacles that inhibit quality is an important approach suggested by this research. Such an approach enables policy-makers to focus on care quality and health outcomes for the population as a whole and identify the appropriate mix of purchasing mechanisms that support service delivery systems to achieve quality objectives. Thus, the choice of payment methods should be made with consideration of the desired change and systems requirements in the context of the existing payment infrastructure.

In terms of quality measures, process indicators empirically linked to clinical health may ensure strong links between a provider’s practice and improved health outcomes, particularly if based on established professional norms and guidance. Measures of care coordination, integration and person-centredness are equally important for patients with chronic conditions. Defining and operationalizing these more complex measures takes substantial effort, however, and their inclusion in the programmes studied was infrequent. Outcomes reported by patients were included in many studies, and these recognize the central role that patients’ behaviours play in the quality of chronic care. But obtaining data about patient-reported outcomes requires investment in special studies.

Relative or progressive quality targets may be more appropriate where there is diversity in providers’ capacities. Such targets may encourage providers and facilities to strive towards gradually improving their standards of care. Moreover, adjusting quality measures to account for patients’ health risks and care complexity may help ensure that providers do not face incentives that inhibit them from caring for the sickest patients. It may also more accurately reflect performance for providers working with populations that have higher health risks. Quality metrics
can also be adjusted for social risk factors to redress equity in provider payments and avoid penalizing health facilities that serve vulnerable patients. Reporting requirements must be as light as possible and based on routine reporting systems to avoid high reporting burdens that take time away from care provision.

**Balancing financial incentives** in payment methods is a critical design challenge. Relatively small, incremental quality payments may not be sufficient to counter stronger incentives in activity-based payment methods that produce a larger share of provider payments. There is weak evidence demonstrating the effect of nonpayment on reducing adverse outcomes. Moreover, the case studies suggested that withholding payment or reducing payments as a penalty had important negative effects. Operationalizing broad recommendations (such as not paying for poor quality care) has, in practice, resulted in policies with unintended consequences that can negatively affect patients. Penalties for poor performance should be considered carefully so as not to undermine a programme’s overall objectives and reduce the resources available for improving quality.

A key design element is **payment certainty**, which may affect providers’ willingness to participate in a programme or accept changes. To establish certainty about and confidence in new payment methods, the process of decision-making should be transparent. This may include decisions about the size of incentive payments and how they are paid, rules for distributing payments across or within teams, linkages to quality metrics and a timely payment schedule. Commitments to changes in payment methods may be sustained when they extend over a relatively longer period of time.

Financial incentives offered to improve quality need to be embedded in **broader quality assurance mechanisms**. This is likely to require strengthening the standards for health systems inputs and processes to provide a foundation for purchasing for quality.

New payment methods can be initiated while also building broader capacities in human resources and service delivery under a **plan for incremental, sequenced implementation**. Such a plan would create a road map for policy-makers to identify and proactively address challenges to quality improvements, as well as key facilitating and inhibiting factors within governance, service delivery, health information systems, and the financial and regulatory environments.

Because payment methods have the potential for harm as well as benefit, it is important to **build monitoring and evaluation into the design** of a payment method before and throughout wide-scale implementation. The design can include a conceptual framework that articulates causal pathways and assumptions, and data collection plans to monitor and sufficiently power an evaluation. Monitoring key design elements can allow for adjustments during implementation to provide optimal incentives and
address unintended effects. Evaluations should test assumptions, address sources of bias and explicitly examine the potential unintended consequences of a broad range of outcomes and the possible differential effects among vulnerable subgroups. Selection bias (among both providers and participants) is the most common challenge in evaluations, and it should be identified and addressed in analytical plans and considered carefully when interpreting results.

There is a lack of good evidence and documentation about other broader purchasing instruments commonly thought to promote quality. These include making information about quality publicly available, using selective contracting, and making geographical price adjustments to ensure sufficient resources to meet minimum quality standards. Close monitoring and evaluation of these instruments are essential to determine their effects on behaviour. Financial incentives for patients to receive better quality care have demonstrated some effects and are another promising initiative deserving more research.

Evidence suggests that there could be more learning from past experiences about the design and evaluation of payment methods, including how lessons learned can be systematically adapted across different countries and contexts. While proactive learning takes time and effort – particularly across settings and among different stakeholders – it is essential to share experiences to avoid continually repeating similar mistakes and implementation failures. The lessons learned from this research study may be useful for countries that are looking to other settings for experiences in optimizing purchasing arrangements and payment methods to provide better quality care for patients with chronic diseases.