JLN/GIZ Case Studies on Payment Innovation for Primary Health Care

In most countries, primary health care (PHC) providers are the first point of contact that people have with the health care system. This part of the system sees the most use and can therefore have the greatest impact on health, particularly among vulnerable populations. International evidence confirms that a stronger PHC sector is associated with greater equity and access to basic health care, higher patient satisfaction, and lower aggregate spending for the same or better outcomes. The role of the PHC sector also determines many of the interactions among the government, purchasers, providers, and the population throughout the health system.

Financing and payment models for PHC can be important tools for addressing issues of access, quality, and equity in health care. Financing and payment models for PHC should allow adequate resources to flow to the primary care level and make priority interventions accessible to the entire population. These models should also create incentives across the health system to manage population health, use resources efficiently, and avoid unnecessary services and expenditures at the secondary and tertiary levels.

In many countries, financing and payment models do not help strengthen PHC; in fact, they tend to exacerbate imbalances that favor expensive tertiary hospitals. This hinders efforts to improve population health and imposes financial burdens on households. Financing systems are often fragmented and involve many different agencies (including national and local governments, insurers and purchasing agencies, development partners, faith-based organizations, and nongovernmental organizations), each with their own funding and payment mechanisms.

IN-DEPTH COUNTRY CASE STUDIES

The series includes case studies on these three countries:

- ARGENTINA
- CHILE
- INDONESIA

Countries find it challenging to develop financing and payment systems for PHC that align with payment systems at other service delivery levels and create both opportunity and incentives to provide better primary care, ensure more equitable access, and shield families from impoverishing out-of-pocket payments. Little evidence is available on effective payment models for PHC that help shift the balance of resources and services toward primary care and prevention to improve population health. Many countries, including those in the Joint Learning Network for Universal Health Coverage[1] (JLN), have tried a wide variety of approaches and models for PHC financing and payment, but few of those experiences have been evaluated or their lessons well documented for an international audience.

The JLN/GIZ Case Studies on Payment Innovation for Primary Health Care aim to help fill this gap by sharing the experiences of three countries—Argentina, Chile, and Indonesia—so peer countries can extract lessons about implementing innovative payment models for PHC. Each case study describes the context, objectives, and governance structure of the PHC payment innovation, the design of the payment model, and how effectively the payment innovations have achieved their objectives.

The Argentina case highlights the effective use of financing and payment for PHC to achieve national health objectives in a highly decentralized context. Chile offers an example of how a country can incrementally introduce major payment reforms during a political transition and then refine the model over time. Indonesia highlights the experience of scaling up a PHC payment innovation in the context of integrating multiple public health insurance schemes.

The following table summarizes each country's payment innovation and how well it has met the country's stated health objectives.

[1] The JLN is an innovative, country-driven network of practitioners and policymakers from around the globe who co-develop global knowledge products that help bridge the gap between theory and practice to extend coverage to more than 3 billion people.

OBJECTIVE	ARGENTINA (PLAN NACER / PROGRAMA SUMAR)	CHILE (FONASA)	INDONESIA (JAMINAN KESEHATAN NASIONAL)
PAYMENT INNOVATION	• Performance-based capitated payment from the Ministry of Health to provincial governments based on total enrollment and regional performance benchmarks. • Fee-for-service payment by provincial governments to providers for priority services, with rates set by the provinces.	• Provision of UHC largely through a single public purchaser (Fonasa) that purchases PHC services from both the public sector (through capitated payments and direct transfers) and private providers (using fee-for-service). • Fixed transfers to public providers in vulnerable/hardship areas with small populations. • Performance-based bonuses paid to health workers in public facilities that meet national health targets.	• Consolidation of all public insurance schemes into a single system, Jaminan Kesehatan Nasional (JKN), with one purchasing agency (BPJS-K). • Capitated payment to public and private PHC facilities with performance-based benchmarks.
ACCESS AND AFFORDABILITY	• Enrollment within the program has increased each year, improving access to services for eligible beneficiaries. In 2015, 16 million were enrolled in the program. • Some evidence indicates that the program has crowded out access to priority services for nonbeneficiaries. However, this does not appear to have affected nonbeneficiary health outcomes.	• Utilization of PHC services has increased over the years. • Enrollment in the public system rapidly expanded after 1997, accounting for about 90% of the country's population by 2015. • The number of public and private providers also increased rapidly, expanding access to those covered by both the public system and private health insurance.	• Utilization of PHC services increased 102% from 2014 to 2016. • Access to PHC facilities has reportedly declined for those covered before the advent of JKN (largely due to increased demand for medical services among the previously uninsured). • Most public facilities outside of major cities lack the autonomy to use capitated payments effectively to improve and invest in their services. • JKN has not yet reached universal coverage, so affordability is assured only for JKN enrollees.
QUALITY	• An evaluation has shown that the program has led to reductions in maternal and child morbidity and mortality and mortality rates for both beneficiaries and nonbeneficiaries. • The risk of neonatal death and low birth weight has fallen for all populations since the program's inception—specifically, a 19% reduction in the probability of low birth weight and a 74% reduction in neonatal mortality. • Researchers estimate that without the program, there would have been an additional 700 neonatal deaths and 1,000 low-birth-weight infants between 2005 and 2008.	• Changes in quality of care have been difficult to measure. • Management commitments (performance-based payments) have helped align PHC facility activities with national targets, thereby strengthening efforts to achieve UHC. • Bonuses to primary care workers for meeting PHC targets have encouraged those workers to provide quality care. • Transparent publishing of capitation rates, service prices, and municipal center revenues has led to increased competition among providers to provide quality care and increased patient demand for high-quality care.	• Providers have pushed back against the performance-based capitation payment system. • Changes in quality of care have been difficult to measure. • Some researchers have argued that the system will not improve quality of care because the indicators measure care coordination and access, and not necessarily quality.

OBJECTIVE	ARGENTINA (PLAN NACER / PROGRAMA SUMAR) 	CHILE (FONASA) 	INDONESIA (JAMINAN KESEHATAN NASIONAL) 
EQUITY	• The difference in health outcomes for nonbeneficiaries and beneficiaries has declined over time.	• Fixed monthly payments (instead of per capita payments) in small catchment areas have helped prevent service interruptions. • Successive budget adjustments have helped address disparities in resources distributed to wealthier regions compared to poorer, more vulnerable regions.	• Regional variation in access to services persists (due to inadequate supply of providers in remote areas). • Access remains below the national benchmark in remote regions (when measured by PHC access or total enrollment). • Lack of adjustments to capitated payments based on regional differences in the price of goods and services for PHC is seen as contributing to inequity.
SUSTAINABILITY	• As a percentage of total health expenditures, the program stayed roughly level between 2005 and 2008 for the nine participating provinces. • In 2008, the total cost of the program was US$39 million—less than 1% of the total Argentine health budget. • Programa Sumar maintains a budget of about 2% of provincial budgets, with continued provincial oversight over health tracers and achievement of regional health objectives. • As of 2017, Programa Sumar is the only national health program that will be continuing with its current objectives and design, even after a national election resulted in a change in the political party in power.	• Funding for PHC accounts for 24.6% of the total health sector budget. • Municipalities consider capitation rates insufficient and in need of adjustment, especially because the initial formula relied on historical budgets (with adjustments) and municipal poverty and rurality indices that have changed over the past 20-plus years. • Complementary PHC programs pose an administrative burden on PHC facilities and also increase the costs covered by the government, especially as the number of these programs has grown (from five in the early 1990s to 51 in 2014).	• Total health care expenditures are increasing rapidly, with utilization as the primary driver. • Utilization of PHC has increased under JKN, but outpatient specialty utilization has increased at a faster rate, which is driving up costs. • As PHC utilization has increased, the gatekeeping policy has been difficult to enforce, which keeps the share of total expenditure on referral services high.

JLN/GIZ CASE STUDIES ON PAYMENT INNOVATION FOR PRIMARY HEALTH CARE

ARGENTINA

Mixed Payment Model for Primary Health Care with Regional Performance Benchmarks

Argentina offers an example of how a country with a decentralized federal system can adopt performance-based funding to improve health system performance and outcomes at the local level. In the early 2000s, Argentina's public primary health care (PHC) system began shifting away from fixed budget transfers from subnational health departments—the traditional approach in Latin American health systems—to a system of output-based financing through the national Plan Nacer (now Programa Sumar). The new financing scheme is a mixed model with performance-based per capita transfers from the national Ministry of Health to provincial governments, which in turn pay providers on a fee-for-service basis for priority services delivered to the target population. Coordinated incentives at the provincial and provider levels have led to improvements in all dimensions of coverage, including enrollment, access, and quality of care.

The Catalyst for Plan Nacer

The Plan Nacer results-based financing scheme was initiated in response to the Argentine economic downturn in 2001. Before that time, a large segment of the population relied on Obras Sociales, the employer-based insurance system that also covers many retirees. As unemployment reached 25% of the labor force, many people lost their employer-based coverage and had to rely on the public health sector, which covered PHC for the uninsured.

At the time, the public health sector comprised national, provincial, and municipal agencies operating under the Ministry of Health and a network of hospitals and public health centers that provided free health care to all. Public PHC providers received funding in the form of fixed budgets from the provincial government and were required to provide care to anyone who needed services. The economic crisis, coupled with an increase in the number of uninsured, led many of these facilities to become overburdened with patients. The resulting implicit rationing of services and diminished patient access to primary care services had a direct impact on health, as evidenced by an increase in maternal and child morbidity and mortality rates. This was most acute in the northern provinces, which were especially hard hit by the economic crisis.

To combat this decline, the government proposed a new financing scheme to be layered on top of the historical budgets that public providers already received from the government, as well as small-scale supply-side investments to improve service delivery in regions with excessive patient demand. The scheme, called Plan Nacer, launched in 2004 and was initially implemented in nine northern provinces where maternal and child mortality was most acute; it covered previously uninsured pregnant women and children up to age 6. In 2007, the scheme was expanded to all provinces.

In 2012, Plan Nacer was renamed Programa Sumar, and it has gradually expanded to include new benefits and population groups. (See the following table.) By 2015, coverage included all individuals up to age 64. Programa Sumar currently provides health coverage for almost 15 million people across the country who lack formal health insurance—close to 100% of the estimated eligible population.

INCREMENTAL EXPANSION OF PLAN NACER / PROGRAMA SUMAR

YEAR	EXPANSION POPULATION	EXPANSION REGION	ESTIMATED TOTAL ENROLLMENT
2004 Plan Nacer	Uninsured pregnant women and children ages 0 to 6	Nine northern provinces	700,000
2007 Plan Nacer	Uninsured pregnant women and children ages 0 to 6	Nationwide	2 million
2012 Programa Sumar	Uninsured children ages 0 to 9, adolescents ages 10 to 19, and women ages 20 to 64	Nationwide	10 million
2015 Programa Sumar	Uninsured men ages 20 to 64	Nationwide	15 million (as of July 2015)

Objectives and Design of the Payment System

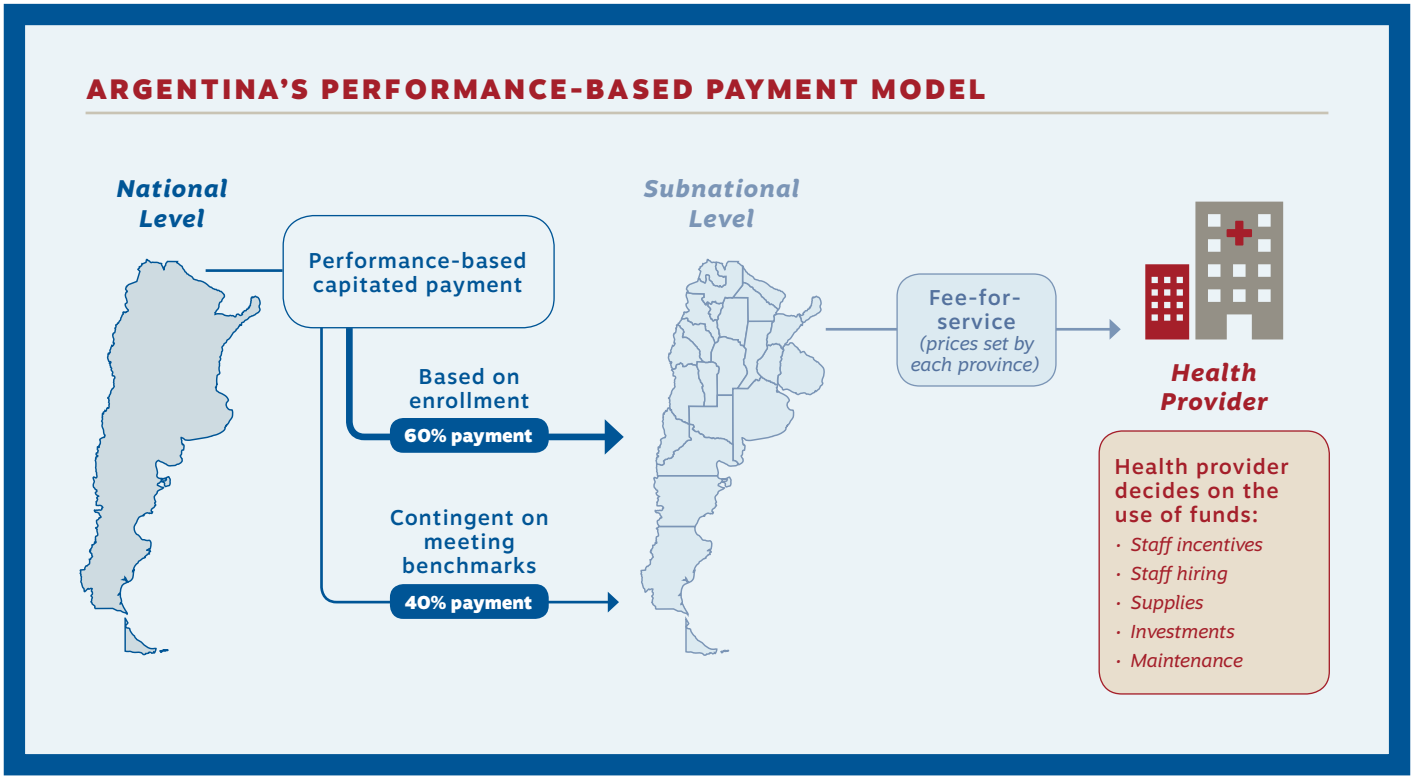
Plan Nacer combined capitation at the provincial level and fee-for-service payment to providers in an effort to expand coverage, increase access to services, and improve the quality of primary health care. Key characteristics included:

- Aligning incentives among the national Ministry of Health, provincial ministries of health, and health providers
- Ensuring extensive oversight and accountability through contractual relationships between purchasers and providers
- Significant autonomy for providers in managing revenues to meet service delivery objectives

GOVERNANCE AND FUNDS FLOWS

The government of Argentina is highly decentralized, with much of the health planning and budgeting occurring at the provincial level. Plan Nacer established contractual relationships between the national Ministry of Health and provincial ministries of health and between the provincial health purchaser governed by provincial ministries of health (provincial health insurance units) and public PHC providers. This has continued under Programa Sumar.

The national Ministry of Health determines health targets for the provinces across 17 performance indicators, including service delivery (such as vaccinations) and health outcomes (such as birth weight). It allocates a per capita payment to the provinces for each beneficiary based on the estimated amount needed to close the gap in funding to deliver the covered services. Plan Nacer had one per capita payment rate for maternal and child care. Programa Sumar currently has two per capita payment rates: one for general health services and one for catastrophic diseases. The per capita amount is transferred in two parts: 60% paid monthly and linked to program enrollment, and 40% paid every four months and contingent on the province meeting certain health tracer (indicator) benchmarks. Enrollees are entitled to receive the package of covered services for free, with providers billing the provincial health insurance unit on a fee-for-service basis. (See the figure below.)



CONTRACTING

All services included in Programa Sumar are delivered through the public health provider network. Participating public health facilities are required to provide all services available under the Programa Sumar service package. Contracting of providers is governed at the provincial level, in keeping with Argentina's decentralized governance system. Providers are required to submit regular reports to provincial authorities on total enrollment and patient health outcomes. Health facilities are subject to provincial government audits and are penalized if they report patient indicators inaccurately. By 2012, more than 7,000 health facilities were participating in Plan Nacer.

SERVICE PACKAGE

The service package varies for each patient population. The benefit package initially consisted of 80 PHC services for mothers and children, with a focus on preventive and promotive care. The services were initially of low complexity and were intended to meet the health needs of pregnant women and children under age 6. The level and scope of services has increased over time and depends on the health needs of each patient population. With the latest expansion of the covered population and services in 2015, the package targets more complex care, including prevention of chronic noncommunicable diseases among the non-elderly and complicated neonatal services.

POPULATION ENROLLMENT

Enrollment in Programa Sumar happens at the provider level and is voluntary. Because each additional enrollee increases the provincial health budget and enables public facilities to receive additional output-based payments, providers and the provincial government have an incentive to enroll more people and increase access to services. The national government oversees enrollee eligibility through scheduled audits.

PAYMENT RATE

Payments are made at two institutional levels. The provincial allocation is a capitated payment from the national Ministry of Health to the provincial health unit. This payment is linked to performance, with 60% paid up front based on the number of enrollees who receive Programa Sumar services, and the remaining 40% contingent on meeting the health tracer benchmarks. Benchmarks are negotiated between each provincial government and the national government because of subnational variations in health outcomes. For every tracer benchmark that is not met, the allocation is reduced on a sliding scale, up to a percentage point maximum. Before the number of tracers was increased from 10 to 17 in 2012 (as shown in the tables on the following page), budgets would decline up to 4 percentage points for each tracer that did not meet the negotiated benchmark.

PROGRAMA SUMAR TRACERS FOR PHC SERVICES

TRACER NUMBER	TRACER	DEFINITION
1	Early pregnancy care	Pregnant women seen before week 13
2	Pregnancy follow-up	Women with at least four prenatal checkups during pregnancy
3	Effectiveness of neonatal care	Children with birth weight between 750 and 1,500 grams surviving 28 days
4	Follow-up for children under age 1	Children with at least six checkups before age 1, as scheduled
5	Intra-provincial equity in follow-up of children under age 1	Equality in terms of health follow-up of children under age 1 in different regions of the same province
6	Detection of congenital heart disease in children under age 1	Children under age 1 with congenital heart disease (CHD) diagnosis reported to the national coordinating referral center
7	Follow-up for children ages 1 to 9	Children who had at least nine checkups between ages 1 and 9, as scheduled
8	Immunization coverage at 24 months	Children at age 2 who received quintuple and polio vaccines between ages 1.5 and 2
9	Immunization coverage at age 7	Children at age 7 who received triple or double viral, triple, and polio vaccines between ages 5 and 7
10	Follow-up for adolescents ages 10 to 19	Adolescents who received at least one annual checkup between ages 10 and 19
11	Promotion of sexual and/or reproductive health rights	Adolescents between ages 10 and 19 and women up to age 24 who took part in sexual and/or reproductive health workshops
12	Prevention of uterine cervical cancer	Women ages 25 to 64 with high-degree lesions or uterine cervical carcinoma diagnosed during the past year
13	Breast cancer care	Women up to age 64 with breast cancer diagnosed in the past year
14	Evaluation of care in cases of maternal and infant death	Evaluation of the care process in cases of maternal and infant death

PROGRAMA SUMAR TRACERS FOR CATASTROPHIC DISEASES

TRACER NUMBER	TRACER	DEFINITION
1	Follow-up care for premature infants	Premature children with birth weight of 500 to 1,500 grams
2	Performance of surgery providers for CHD	Measurement and communication of CHD surgery facilities scoring
3	Follow-up of children following CHD surgery	Children who have had CHD surgery

The basis for payment to individual providers is determined at the provincial level. The provincial government determines a set of priority services and negotiates a fee-for-service payment rate for all facilities that align with provincial health objectives. The agreed-upon rates signal to providers which services are considered high priority. Through a periodic review process, these rates can be modified if local governments believe that certain services are underutilized among their patient populations. This allows for the national package to be tailored to each province's unique health issues related to access, affordability, and quality.

PERFORMANCE MONITORING

As part of the contract for services, public health facilities must document their performance on each of the health indicators and report it to the provincial government, following strict reporting requirements. The program includes a rigorous process for monitoring and evaluating clinical records to ensure that each facility is accurately reporting patient outcomes and enrollment. Training for newly contracted providers can be intensive and require a high level of managerial competency.

Compliance monitoring has three main components:

- The national government periodically sends auditing teams to the provinces to generate recommendations for improving the program's performance.
- Provincial purchasers submit a monthly dashboard that measures the province's progress against the negotiated regional benchmarks.
- Bimonthly financial and health care audits are conducted by independent firms and contractors that verify the eligibility of enrolled beneficiaries, audit financial transfers from the national government to the provinces, and confirm that provincial payments to public health facilities have been only for eligible beneficiaries.

USE OF FUNDS

Public health facilities have a high degree of autonomy in the use of Programa Sumar funds. They can invest and use payments based on their own priorities and needs within a certain set of line items: employee incentives, hiring of staff, medical supplies, capital spending, and facility maintenance. Because Programa Sumar payments are limited to specific beneficiaries and are paid on top of fixed budgets that each public health facility receives from the government, they generally do not go toward salaries or the full cost of services. Rather, they primarily cover variable costs associated with services within the benefits package. Providers have the autonomy to reinvest in their facility and make capital improvements that enable better service delivery for the province's priority services.

Has Argentina's Payment Innovation Achieved Its Objectives?

The mixed financing model for PHC has done much to improve health outcomes among the uninsured in Argentina since the early 2000s. Birth outcomes have improved, and neonatal mortality has decreased. The impact on health worker motivation has also been positive. Although capitated payments add only about 1% to 2% to provincial health budgets, this translates into significant gains in flexible resources in the hands of frontline providers.

The success of Plan Nacer and Programa Sumar offers some important insights. The 12-year phased implementation allowed for lessons from previous expansions to be incorporated as the program gained in complexity. The rigorous accountability mechanisms at the national and provincial levels have also ensured that providers and regional health planners have the support necessary to ensure that the program functions effectively. Participating public health facilities have a high degree of managerial competence and autonomy and are well supported by provincial governments with significant health planning capacity.

The following table summarizes results related to the four objectives of the PHC payment reform in Argentina.

OBJECTIVE	RESULTS AND CONCLUSIONS
ACCESS AND AFFORDABILITY	• Enrollment within the program has increased each year, improving access to services for eligible populations. In 2015, 16 million people were enrolled in the program. • Some evidence indicates that Programa Sumar has crowded out access to priority services for nonbeneficiaries. However, this does not appear to have affected nonbeneficiary health outcomes.
QUALITY	• An evaluation has shown that the program has led to reductions in maternal and child morbidity and mortality and mortality rates for both beneficiaries and nonbeneficiaries. • The risk of neonatal death and low birth weight has fallen for all populations since the program's inception—specifically, a 19% reduction in the probability of low birth weight and a 74% reduction in neonatal mortality. • Researchers estimate that without the program, there would have been an additional 700 neonatal deaths and 1,000 low-birth-weight infants between 2005 and 2008.
EQUITY	• The difference in health outcomes for nonbeneficiaries and beneficiaries has declined over time.
SUSTAINABILITY	• As a percentage of total health expenditures, Plan Nacer stayed roughly level between 2005 and 2008 for the nine participating provinces. • In 2008, the total cost of the program was US$39 million—less than 1% of the total Argentine health budget. • Programa Sumar maintains a budget of about 2% of provincial budgets, with continued provincial oversight over health tracers and achievement of regional health objectives. • As of 2017, Programa Sumar is the only national health program that will be continuing with its current objectives and design, even after a national election resulted in a change in the political party in power.

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Capitation/Mixed Payment Model for Primary Health Care with Quality Incentives

Chile provides universal health coverage (UHC) through a mix of public and private providers operating at all levels of the service delivery spectrum, funded primarily through a single public purchaser (Fonasa) and private insurance companies (Isapres). It offers an example of how a country can introduce major health reforms incrementally during a political transition. Chile's shift from a fee-based payment model to a capitation/mixed payment model offers many lessons for countries looking to institute payment system reforms to achieve UHC and introduce incentives for delivering quality primary health care (PHC).

CHILE AT A GLANCE

Chile is a high-income country in Latin America with a population of 17.5 million and estimated per capita health expenditures of US$1,877 as of 2015, according to the Ministry of Health. With favorable health indicators such as a life expectancy of 81 years and an infant mortality rate of 7 per 1,000 live births, Chile is reaping the benefits of strong preventive care efforts. That said, Chile has seen negative health effects from an improved economic situation, including an aging population and prevalence of noncommunicable diseases, such as obesity, diabetes, cancer, and heart disease. This has forced the country to continue to invest in and emphasize PHC.

Primary Health Care Before the Reforms

Before 1989, Chile was a military state and its health system was primarily publicly funded, with public facilities operated by municipal governments providing most primary health care. Chile's National Health Service (SNS) used general tax revenues and social security contributions from employees to fund public health care. Payment for PHC services was made by Fonasa to municipalities through a standard fee-for-service model (known as FAPEM), using a list of services and corresponding prices determined by the central government. This model led to overprovision of curative services that garnered higher fees and did little to promote primary care or address equity or quality of care.

During this period, Chile's military government rolled out a market-oriented reform that allowed Isapres to compete with the public system. Salaried workers could opt out of the social security system and use the legally mandated 7% of wages to purchase private health insurance. At its peak in the 1990s, private health insurance covered 26% of the population.

With the return of democratic elections in 1989, Chile's new civilian government faced growing pressure to improve public systems. As a result, public funding for health increased substantially, but due to inaccessibility in the public system and the introduction of private insurance, demand for private healthcare continued to grow more attractive to providers, which led to increased costs for patients. To address this issue, the central government purchasing agency, Fonasa, introduced two new payment mechanisms for PHC: capitation and direct transfers to national programs run by the municipalities.

This case study describes the design and objectives of Chile's payment system reforms and how effectively they have met the objectives.

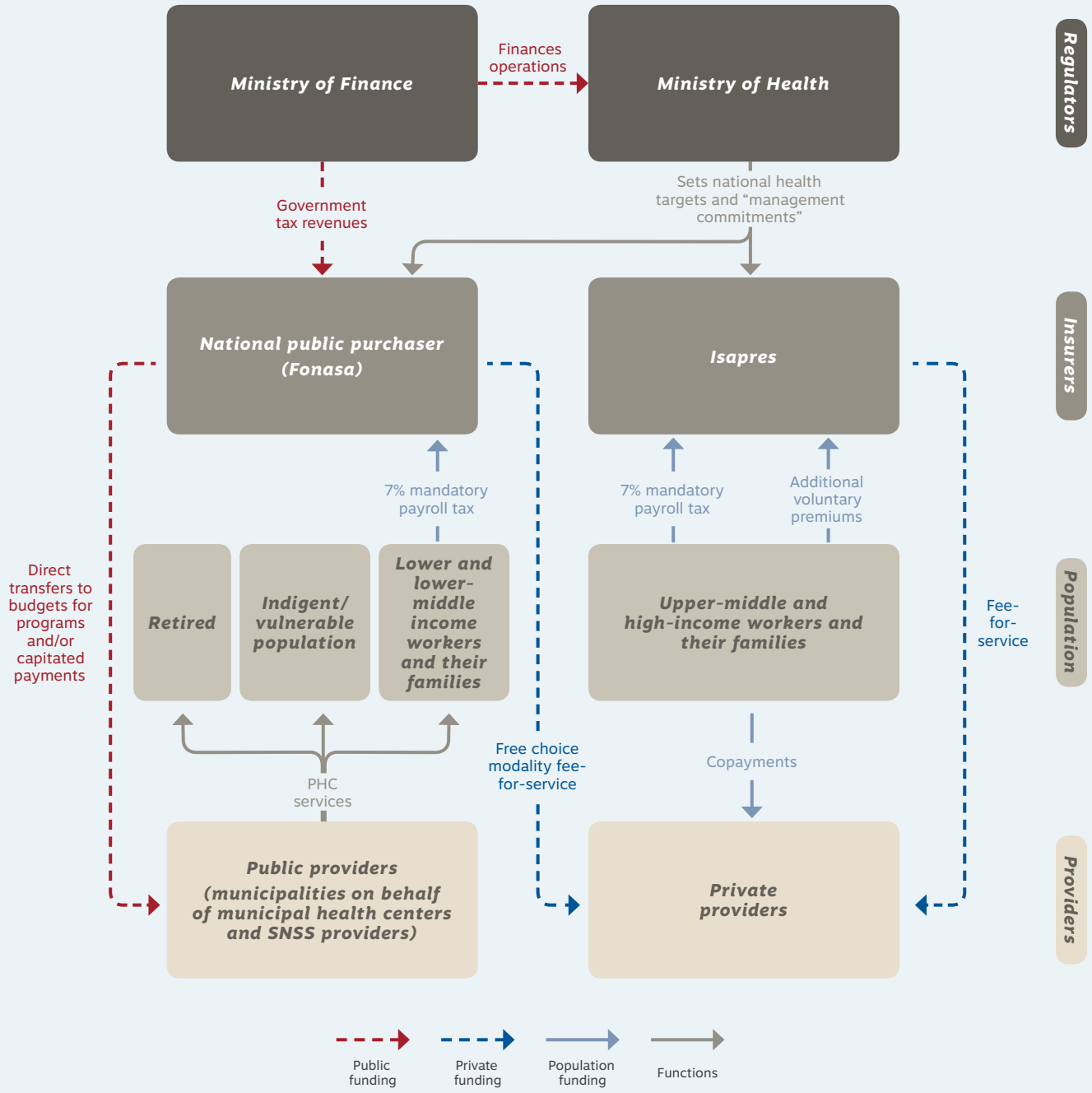
Introduction of Capitation Payment for Municipal Health Centers

In 1994, Fonasa rolled out a capitation payment system with the aim of addressing inequity and increasing the autonomy of the national health service delivery system (renamed SNSS following earlier reforms) and primary care providers. The reform also included elements of financial decentralization, prospective payments for health care activities, and administrative streamlining that included using technology to create efficiencies and reduce costs. Two unique features of the system included performance targets in the form of "management commitments," which gave incentives to providers to deliver better care, and the introduction of fixed monthly payments to providers in areas with small catchment populations.

In contrast to Fonasa, Isapres purchase health services mostly from private providers using fee-for-service payment. Some Isapres are considering using capitation to purchase specific services, but no data are available on the status of this proposal.

The following figure shows PHC financial flows under the reformed system.

GOVERNANCE AND FINANCIAL FLOWS AFTER THE REFORMS



Adapted from Bitrán et al.

Objectives and Design of the Capitation Payment System

The capitation payment system in Chile was meant to improve access, affordability, and quality of PHC while containing costs and making more efficient use of covered services. It has four primary components:

- **Base capitation rate.** This payment is intended to cover delivery of the basic set of PHC services (the Family Health Plan). The government determines this rate using a technical costing exercise rather than relying on historical utilization and payment patterns.
- **Criteria to identify beneficiaries.** Identifying the enrollee population at each municipal health facility (based on poverty level, rurality, zone, and number of elderly enrollees) allows the government to forecast health needs and plan accordingly.
- **Special payment mechanism for rural and impoverished areas.** In conjunction with identifying enrollee populations, the government uses widely accepted standards to classify areas as hardship zones or vulnerable areas and assigns these areas direct transfers instead of using a per capita payment. These areas usually consist of fewer than 3,500 persons.
- **Management commitments.** These incentive-based payments for meeting service delivery targets encourage providers to align their activities with national goals and not underprovide key services.

CONTRACTING

The SNSS provides 99% of the nation's public health care (92% through municipal health centers, 7% through regional health services, and 1% through nongovernmental organizations). The system comprises 29 decentralized regional health services, which are further decentralized down to the level of the municipality, of which there are 346. All told, the municipalities manage and contract with 1,870 health centers to deliver PHC with central government funding through Fonasa (in the form of capitated payment or direct transfer) and their own municipal budgets. Some PHC providers are operated directly by SNSS.

Fonasa contracts directly with private providers and uses a voucher system to co-finance services using a fee-for-service model. Fonasa can also contract with private providers through framework agreements, public tenders, and direct-deal agreements for specific services that are not available at public centers or when capacity or access issues arise.

SERVICE PACKAGE

Capitated payments to municipalities and direct transfers from Fonasa are meant to cover services in the Family Health Plan, which includes eight programs:

- Well baby and children's health (ages 0 to 9 years)
- Maternal health (including family planning and prenatal care)
- Women's health
- Adult health (ages 40 to 64)
- Elderly health (ages 65 and over)
- Oral health
- AUGE services[1]
- General activities (related to all programs)

PERFORMANCE MONITORING

The Ministry of Health and regional health services set annual PHC targets at the national level and adjust them for each municipality. Frontline health workers in facilities that meet their goals receive a 13-month salary bonus. Examples of goals include increased screening for psychomotor deficits in children; increased screening for cervical-uterine cancer in women; higher rates of normal HbA1c tests for diabetic patients; and higher rates of normal blood pressure findings in patients with hypertension. The national government also defines annual goals for municipalities to promote priority services and ensure at least a minimum quantity of care. Failure to meet capitation indicator targets results in a reduced capitation transfer. Municipal targets include increased rates of preventive screening for various age groups; targets associated with access, equity, and timeliness of care; and care for diagnoses covered by the explicit health guarantees (AUGE services).

[1] AUGE (Universal Access to Explicit Health Guarantees) is the list of 80 pathologies that all public and private providers are required by law to treat in a timely and affordable manner and with high quality.

Municipalities are evaluated on three levels of activity:

- **General Activity** (including preventive care, timeliness, accessibility and equity, and use of a multidisciplinary and/or family approach)
- **Continuity of Care Activity** (including indicators that focus on night and weekend care availability)
- **Activity with Health Care Services Guaranteed** (timely compliance with care standards for 12 tracer diseases in the AUGE benefits package)

The following table shows the 2016 targets associated with the General Activity level.

GENERAL ACTIVITY TARGETS FOR 2016

TARGET NUMBER	ACTIVITY	GOAL	2015 LEVEL
1	Coverage of preventive medicine exam for men ages 20 to 44	25%	16.17%
2	Coverage of preventive medicine exam for women ages 45 to 64	26%	25.20%
3	Coverage of preventive medicine exam for adults ages 64 and older	55%	44.89%
4	Early admission for maternity care (before 14 weeks)	87%	87.30%
5	Proportion of people under age 20 receiving comprehensive dental treatment	24%	26.19%
6	Patient satisfaction with PHC	97%	99.30%
7	Coverage of care for diabetes mellitus in people ages 15 and older	55%	55.60%
8	Coverage of care for hypertension in people ages 15 and older	71%	69.30%
9	Coverage of neurological/cognitive treatment for children ages 12 to 23 months within PHC	94%	93.90%
10	Home care visit rate in underserved areas	22%	25%
11	Coverage of care for asthma and chronic obstructive pulmonary disease in people ages 40 and older	22%	17%
12	Coverage of comprehensive care for mental disorders in people ages 5 and older	17%	25%
13	Comprehensive health coverage for adolescents ages 10 to 14	15%	(new)

In 2017, the list of general activity targets was expanded to 21, including targets for in-network care, vaccine supply, medical consultation rate, and referrals to specialists.

POPULATION ENROLLMENT

Enrollment takes place in municipal health centers using a demographic instrument and automated database designed for the capitation system. The data are fed into the national health information system, which is paperless and allows for a seamless check-in process at all primary care centers in Chile. (It also supports planning of health care services and staffing.) Individuals who visit a PHC center outside of their municipality are treated but redirected to their own municipality. If they repeatedly visit a center at which they are not enrolled, the system will automatically shift their enrollment to the new center. The information system can be credited with improved monitoring and implementation of the capitation system.

PAYMENT RATE

To determine the capitation rate, Fonasa conducted a costing exercise that considered direct and indirect costs of providing services in the Family Health Plan. The base capitation rate for each enrollee includes labor costs, administration, and a percentage of pharmaceuticals. As of 2017, this rate was 5,396 Chilean pesos (US$8.40) per month. Fonasa makes four adjustments to determine the final capitated payment to each municipal health center based on the following factors:

- **Socioeconomic characteristics** (poverty and age distribution of the enrollees)
- **Rurality** (distance from urban centers and population density)
- **Work hardships** (applied largely to centers in remote areas that received a larger capitated payment than those in more urban areas)

Regions with poor and vulnerable smaller populations (fewer than 3,500 people) where it is not feasible to implement capitation receive fixed monthly payments as direct transfers instead of capitated payments.

USE OF CAPITATION FUNDS

Fonasa purchases primary health care through municipalities, which manage public providers. Payments to municipalities are made through capitated payments, fee-for-service payments (with rates set based on historical budgets set by regional health services), and prospective transfers for complementary PHC programs. (See the accompanying sidebar.) The capitated payments go toward PHC delivery and cover direct labor, administrative costs, and partial pharmacy costs. The use of capitation funds is governed by a law that also governs transfers from the central government to municipalities. This law makes municipalities responsible for managing financial and human resources, and has facilitated the implementation of the health information monitoring system that records the number of enrollees and contracted hours of care.

COMPLEMENTARY PHC PROGRAMS

In the 1990s, a set of community programs known as PHC Strengthening Programs emerged in response to health coverage gaps attributable to changing epidemiological profiles that featured more chronic noncommunicable diseases and insurance coverage patterns. The programs channel resources to areas with the lowest socioeconomic health indicators. However, Fonasa and the Ministry of Health feared that the programs would be unable to adequately monitor outputs at municipal health centers, so they excluded these programs from the national system. The programs are therefore funded separately using prospective transfers between regional health services and municipal facilities. This payment mechanism represents almost 20% of the health budget of each municipality. The municipalities receive a first payment at the beginning of the year, and the second payment depends on an assessment of compliance, which occurs in August. This type of payment is only for activities that are outside of the Family Health Plan but complement the activities delivered under capitation. It does not apply to all municipalities.

Results and Conclusions

After more than 20 years, the capitation mechanism in Chile merits a fresh look, especially as it relates to the following:

- **Capitation formula.** Capitation transfer payments were initially calculated based on historical budgets, with adjustments for poverty indices, because epidemiological data on the number of impoverished individuals were lacking. Now, census data are available that could be used in costing exercises. New variables such as extended hours of care and morbidity should also be factored into the calculations because they have direct cost implications.
- **Target population.** The rurality index used more than 20 years ago is also obsolete, given the economic changes in Chile. The parameters of the index should be adjusted to ensure that resources are better targeted toward vulnerable areas and populations.
- **Effectiveness and completeness of the capitation rollout.** Chile has yet to ensure 100% coverage of the population under capitation because service provision remains fragmented between municipal providers and PHC providers managed by the SNSS. PHC facilities operating under the SNSS have had trouble enrolling people in the capitation system. They have only recently initiated the process of ensuring that enrollees of municipal PHC facilities match up with the SNSS facility enrollees.

Other results related to the four objectives of the PHC payment reform are listed in the following table.

OBJECTIVE	RESULTS AND CONCLUSIONS
ACCESS AND AFFORDABILITY	• Utilization of PHC services has increased over the years. • Enrollment in the public system rapidly expanded after 1997, accounting for about 90% of the country's population by 2015. • The number of public and private providers also increased rapidly, expanding access to those covered by both the public system and private health insurance.
QUALITY	• Changes in quality of care have been difficult to measure. However, Chile has begun to track patient-reported outcomes related to quality of life in areas such as mental health and dental care. • Management commitments have helped align PHC facility activities with national targets, thereby strengthening efforts to achieve universal health care. • Bonuses to primary care worker for meeting PHC targets have encouraged those workers to provide quality care. • Transparent publishing of capitation rates, service prices, and municipal center revenues have increased competition among providers to provide quality care and have increased patient demand for high-quality care.
EQUITY	• Coverage of Fonasa beneficiaries as of 2015 is at 90%. However, more needs to be done to better identify beneficiaries in hard-to-reach areas with limited access to facilities, which makes it difficult to predict need. • Fixed monthly payments (instead of per capita payments) in small catchment areas have helped prevent service interruptions. • Successive budget adjustments have helped address disparities in resources distributed to wealthier regions compared to poorer, more vulnerable regions.
SUSTAINABILITY	• Funding for PHC accounts for 24.6% of the total health sector budget. • Municipalities consider capitation rates insufficient and in need of adjustment, especially because the initial formula relied on historical budgets (with adjustments) and municipal poverty and rurality indices that have changed over the past 20-plus years. • Complementary PHC programs impose an administrative burden on PHC facilities and also increase the costs covered by the government, especially as the number of these programs has grown (from five in the early 1990s to 51 in 2014). Municipal centers must carefully balance the costs of implementing these programs with the costs of providing mandatory AUGE services to ensure sustainability of the programs and not compromise service quality.

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JLN/GIZ CASE STUDIES ON PAYMENT INNOVATION FOR PRIMARY HEALTH CARE

INDONESIA

Capitation Payment System for Primary Health Care with Performance Benchmarks

In 2012, the government of Indonesia declared its goal of achieving universal health coverage (UHC) by 2019, and in 2014 it launched the national health insurance program, Jaminan Kesehatan Nasional (JKN). JKN consolidated all of the existing public health insurance schemes, expanded coverage to a large share of the previously uninsured, and created a single purchasing agency, Badan Penyelenggara Jaminan Sosial Kesehatan (BPJS-K), to gain efficiencies and improve service delivery through strategic health purchasing.

*Similar to other low- and middle-income countries, Indonesia has seen a steady increase in the prevalence of chronic diseases, so the government has shifted its focus to primary health care (PHC). Historically in Indonesia, funding for PHC providers was channeled through district governments, with any revenue earned by public PHC providers (*puskesmas*) going directly into district budgets. To promote more efficient use of health resources, Indonesia has implemented capitated payment for PHC providers under JKN, with providers paid based on patient enrollment rather than on line-item budgets or patient encounters. Public PHC providers have also been gaining autonomy to directly receive capitated payments and make some decisions about how the revenues are used.*

This case study describes the objectives of Indonesia's PHC capitation payment system under JKN, the design of the system, and how effectively it has met its objectives as of 2017.

Capitation Payment System for PHC in the National Health Insurance Program

In 2014, Indonesia consolidated disparate public insurance schemes under JKN, creating one risk pool, which allowed the purchasing agency BPJS-K to streamline payment for PHC services. Consolidation of the schemes (described in the table below) also extended coverage to unemployed and informal-sector workers, who previously paid out of pocket for health care services and often could not afford health services at all.

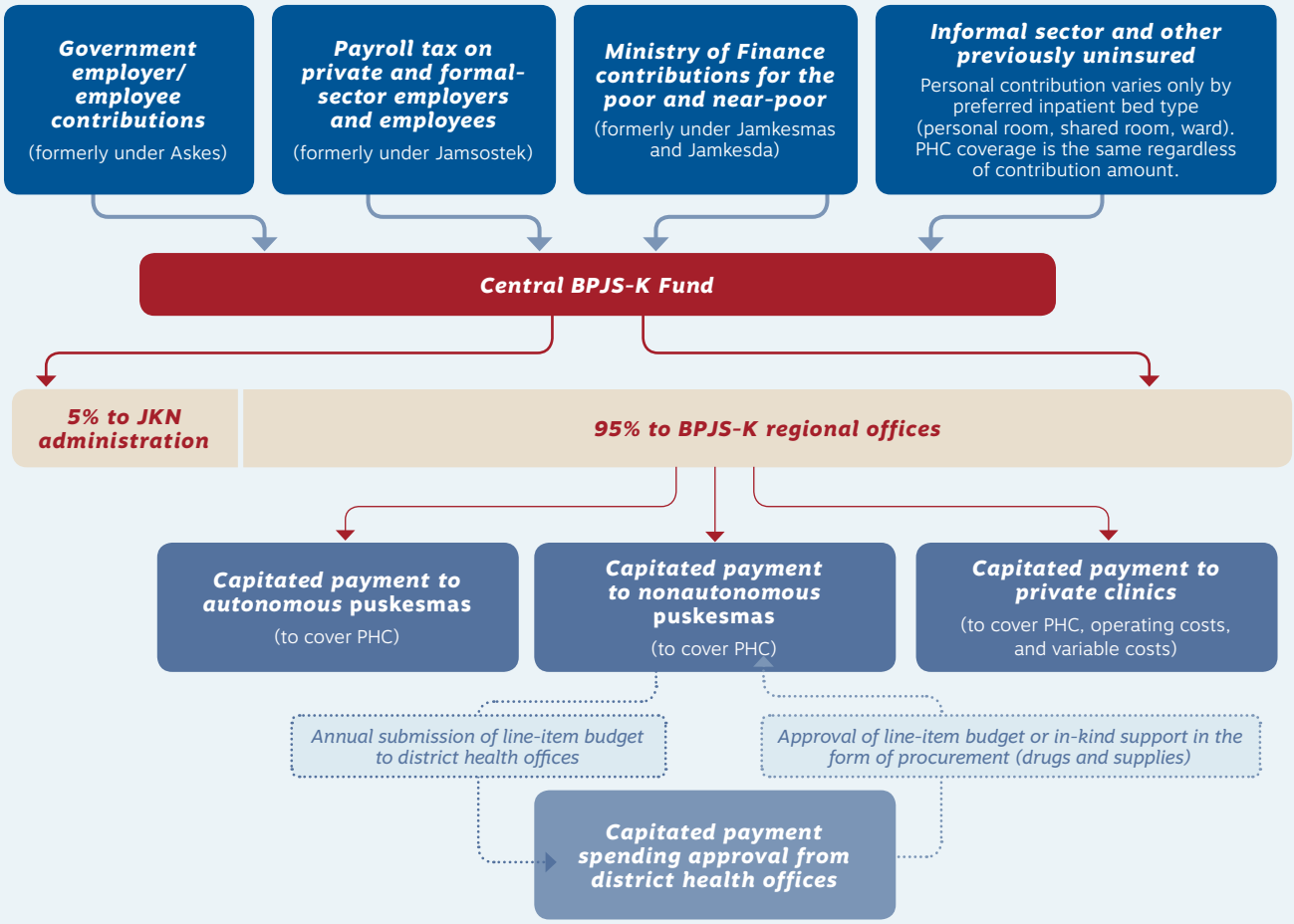
PUBLIC INSURANCE SCHEMES BEFORE THE JKN REFORM

INSURANCE SCHEME	ENROLLEES (AS OF 2013)	PRIMARY FUNDING SOURCE	PAYMENT SYSTEM	CONTRACTED PHC PROVIDERS	BENEFITS PACKAGE
ASKES Current and retired civil servants and their dependents (including military)	16.6 million	Employee and employer contributions	Capitation	Primarily public facilities	Comprehensive, with no conditions excluded
JAMSOSTEK Private and formal-sector workers	5 million	Payroll tax on employers and employees	Capitation	Private and public facilities	Comprehensive, but excluding self-inflicted conditions and conditions caused by natural disasters and extreme sports
JAMKESMAS (national) **JAMKESDA** (local) Poor and near-poor	76.4 million	Ministry of Finance and subnational governments	Claim-based fee-for-service	Public facilities	Jamkesmas: Comprehensive Jamkesda: Comprehensive, with additional benefits and coverage reflecting fiscal capacity and health objectives of the local government

GOVERNANCE OF PHC FINANCIAL FLOWS

Health care contributions for the formal sector, including government employees, are pooled in the central BPJS-K fund. For government-supported social services, the government's integrated eligibility program assesses applicants and then the Ministry of Health sends the appropriate level of resources to BPJS-K. The annual individual contribution amount is reassessed yearly by the Ministry of Finance to ensure sustainability of coverage.

Contributions for the populations that were formerly under the Askes, Jamkesda, Jamkesmas, and Jamsostek schemes are sent directly to the national BPJS-K office, which allocates 5% of the budget to JKN administration and BPJS-K operations. BPJS-K then allocates the capitated payments to *puskesmas* and private clinics based on the number of enrolled patients. The payments for services outside of the approved list of services for capitation, such as labor and delivery care, are made through a claims-based bundled payment system. Claims payments for autonomous *puskesmas* (those certified by district health offices to use their operating revenue to directly purchase equipment and services) are sent directly to the clinics. Claims payments for nonautonomous *puskesmas* are sent to the district health office, which sends the money to the facility.



Even before the JKN reform, the government had been expanding access to PHC by investing in public providers in remote and rural areas (particularly to improve basic emergency obstetric and neonatal care) and contracting with private providers. Between 2009 and 2013, the number of *puskesmas* increased by 10%.

Under JKN, *puskesmas* are paid for services through a combination of monthly BPJS-K capitated payments and district- and national-level funds. The capitated payments are top-ups given to *puskesmas* in addition to the line-item budgets they receive for their fixed costs and labor costs. The capitated payments are meant to cover the costs associated with each additional patient, not the provider's fixed costs (such as operating costs). Private providers are paid either through capitation or through fee-for-service claims for care they are not contractually obligated to provide through capitation. The capitated payments to private clinics are expected to cover all of the facility's costs, including fixed operating costs (such as salaries and building maintenance) and variable costs (such as medical supplies).

Objectives and Design of the Capitation Payment System

BPJS-K had four objectives when adopting scaled-up capitation for PHC beyond the earlier government insurance programs for civil servants and formal-sector workers:

- Increase access and affordability
- Improve the quality of care
- Increase equity of care delivery
- Promote more efficient use of services, thereby improving the sustainability of the health care system

The capitation payment system adopted by BPJS-K was intended to promote efficiency among both public and private PHC providers by bundling payment for comprehensive PHC services into a single monthly per capita payment. The public programs, Askes and Jamsostek, were already paying for PHC using a capitation system, but the largest insurance program, Jamkesmas, was using fee-for-service payment for PHC services. The scale-up of capitation in JKN was meant to give providers an incentive to provide promotive and preventive care to JKN beneficiaries (rather than deliver a larger volume of care), thereby shifting the financial risk of ineffective care from the purchaser and patients to the provider.

CONTRACTING

Under JKN's capitation payment system, contracting for PHC services is overseen by the regional BPJS-K office, which contracts with three types of PHC facilities: private health clinics, autonomous public health clinics, and nonautonomous public health clinics. BPJS-K regional offices must contract with all public facilities; they contract with private facilities only if those facilities have met certain staffing, facility, and equipment standards.

SERVICE PACKAGE

Under JKN, enrollees have access to a comprehensive package of necessary health services, including comprehensive PHC. The PHC package includes:

- Promotive and preventive services, including individual health counseling, basic immunization, family planning, and health screening
- Medical examinations, treatment, and medical consultations
- Nonspecialty medical treatment, either surgical or nonsurgical
- Medicine and medical consumables
- Blood transfusion
- First-level laboratory examinations
- First-level inpatient care

The PHC service package is further defined by the Ministry of Health as 144 services that *puskesmas* must provide. These were determined by the national government based on the level of competency that a general practitioner should have achieved at the time of certification, but regional districts can modify the list based on facility capacity. Individual facilities can petition a regional committee for an exemption from certain diagnoses that the provider does not have the capacity to treat. This is especially relevant in remote regions. The regional BPJS-K office also contracts with district providers for PHC

services outside of the basic package, which it pays for through fee-for-service. An example of services excluded from capitated payment are specific elements of prenatal care—to ensure that mothers with high medical risks are not turned away by providers.

POPULATION ENROLLMENT

BPJS-K initially assigns each JKN enrollee to a PHC provider based on the recommendation of the district or municipal health office. Individuals who live within a public health facility's catchment area are automatically assigned to that facility, but after three months they have the option to select a different *puskesmas* or a private PHC facility. Patient enrollment is tracked through P-care, Indonesia's electronic medical records database. Enrollment changes are documented by the regional BPJS-K office, which adjusts the capitated monthly budget for each facility accordingly.

Enrollees are required to obtain services at the PHC facility where they are registered unless a referral is made. BPJS-K has developed a computer application (Aplicare) that helps JKN enrollees identify the health facilities that are nearest to them, provides a brief profile of each facility, and supports PHC providers in referring patients to facilities with the appropriate competencies.

Concerns have arisen about imbalances in the distribution of enrollees across PHC providers. Although the average ratio of enrollees per doctor in PHC facilities is 5,000:1, which is the target, the ratio exceeds 8,500:1 for *puskesmas* in seven out of 34 provinces. Private PHC providers, on the other hand, have much lower ratios, typically below 2,500:1.

PAYMENT RATE

The capitation rate is 3,000 to 6,000 Indonesian rupiahs per patient per month (about 25 to 50 U.S. cents) and is the same for both public and private PHC facilities, although private providers do not receive the subsidies for staff and infrastructure that public providers receive. No adjustments are made to the base capitation rate for age, sex, or other indicators of health need; instead, the base rate is determined by supply-side variables such as availability of doctors, dentists, and 24-hour services. Capitation rates are also not adjusted for community-level risk or other facility-level factors. The Ministry of Health has set a special capitation rate for remote areas, but the differential is considered too small to compensate PHC providers for the smaller catchment areas and higher fixed costs and transportation needs in rural and remote areas (given Indonesia's challenging geography of more than 17,000 islands). Capitated payments are linked to a set of facility-level performance indicators. Meeting the benchmark on all indicators ensures the full monthly payment; for each benchmark not met, the payment is lowered by 5%, for a maximum decrease of 10%.

PERFORMANCE MONITORING

BPJS-K monitors the performance of PHC providers through P-care. Facilities log information about each patient into the region's P-care database, and the regional BPJS-K office collects the data and produces monthly reports. The indicators are:

- **Contact rate.** The proportion of enrolled patients who had some contact with the provider. To receive the full capitated payment, a facility's contact rate must exceed 1.5%.
- **Referral rate.** The proportion of referrals to specialists that are for a primary care diagnosis. To receive the full capitated payment, a facility's referral rate must be lower than 5%.
- **Chronic Disease Management Program (PROLANIS) measures.** The proportion of individuals with hypertension or diabetes who participate in a facility's fitness and wellness club. To receive the full capitated payment, a facility must have more than 50% participation among patients with these chronic conditions.

Capitated payments are lowered if a facility fails to meet the benchmarks. As of 2017, only *puskesmas* in Jakarta participated in the performance-based payment program, but expansion to all public and private facilities is planned for 2018.

Only national and regional BPJS-K administrators currently have access to the P-care and claims data—it is not available to local administrators for use in policy formulation, planning, and budgeting. There is a push to allow health agencies at all levels to have full access to the data, but this has yet to be implemented.

USE OF CAPITATION FUNDS

Capitated payments are paid directly to private primary care clinics and *puskesmas* that have bank accounts in the local treasury system. The use of the capitation revenue by public providers is restricted, with up to 40% designated for operational expenditures (such as supplies) and 60% or more to pay fees directly to health workers. The portion of the capitation revenue that is distributed to individual health workers also follows a set of rules and criteria.

Has Indonesia's Payment Innovation Achieved Its Objectives?

Capitated payment is part of a set of generally strong policies adopted by the Ministry of Health and JKN in support of PHC. Nonetheless, challenges remain, with unequal access to PHC that meets service delivery standards and low priority for PHC in total BPJS-K spending (less than 20% in 2016). Furthermore, the lack of flexibility in the use of capitation funds may limit efficiency gains and provider-driven service delivery improvements.

The Ministry of Health and BPJS-K are working to improve the implementation of capitation and add complementary measures to strengthen PHC financing and service delivery. For example, a new Ministry of Health program makes local governments accountable for 12 new minimum service standards for promotion and prevention programs related to conditions such as mental health, hypertension, diabetes, tuberculosis, and HIV. These services are intended to complement JKN and help reduce the need for curative services.

DECENTRALIZATION AND HEALTH CARE ADMINISTRATION

In 2001, Indonesia began decentralizing government functions, with district administrators taking on responsibility for planning, managing, and financing most public services. This has affected all aspects of PHC governance, but it has been particularly apparent in the regulation and supervision of provider resources. The Ministry of Health has no direct authority over the subnational health offices, and provincial health offices have a supervisory role over district health offices.

Nonautonomous facilities must submit a yearly budget to the district health office outlining all spending for the upcoming year. The provider cannot deviate from the budgetary plan until the next year's review, even if the provider's monthly revenue changes due to a change in the composition of its patient panel. Consequently, many nonautonomous facilities have unspent capitated payments in their bank accounts.

Even in autonomous facilities, the complicated rules governing the allocation of capitation revenue have sometimes led to low absorption, with the revenue taken back by the government treasury if it is unspent at the end of the year. All of these challenges mean that public PHC facilities have minimal opportunity to retain surpluses—which can limit the effectiveness of efficiency incentives.

Results related to the four objectives of the PHC payment system are listed in the following table.

OBJECTIVE	RESULTS AND CONCLUSIONS
ACCESS AND AFFORDABILITY	• Utilization of PHC services increased 102% from 2014 to 2016. • Access to PHC facilities has reportedly declined for those covered before the advent of JKN (largely due to increased demand for medical services among the previously uninsured). • Most public facilities outside of major cities lack the autonomy to invest in their services. • JKN has not yet reached universal coverage, so affordability is assured only for those enrolled in JKN.
QUALITY	• Providers have pushed back against the performance-based capitation payment system. • Changes in quality of care have been difficult to measure. • Some researchers have argued that the system will not improve quality of care because the indicators measure care coordination and access, and not necessarily quality.
EQUITY	• Regional variation in access to services persists (due to inadequate supply of providers in remote areas). • Access remains below the national benchmark in remote regions (when measured by PHC access or total enrollment). • Lack of adjustments to capitated payments based on regional differences in the price of goods and services for PHC is seen as contributing to inequity.
SUSTAINABILITY	• Total health care expenditures are increasing rapidly, with utilization as the primary driver. • Utilization of PHC has increased under JKN, but outpatient specialty utilization has increased at a faster rate, which is driving up costs. • As PHC utilization has increased, the gatekeeping policy has been difficult to enforce, which keeps the share of total expenditure on referral services high.

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