



Vision Foundation
for Strategic Studies

Health Insurance Initiative – A Sustainable Solution for Equity



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Abstract:

Although the Sulaymaniyah Governorate is among the most socioeconomically developed regions in the Kurdistan Region of Iraq, it has a severe health financing problem, with more than three-quarters of healthcare expenses being out of pocket. Such a tremendous financial load has rendered healthcare mostly unaffordable to vulnerable populations like the elderly, unemployed, and displaced people. In reaction, a detailed health insurance model has been suggested, and an economic model has been developed that exhibits its sustainability, equity, and viability. The proposed model is based on the best practices used internationally, such as hybrid financing schemes in Germany (Bismarck), the United Kingdom (Beveridge/NHS), Turkey, and the United States, which are all mandatory contributions on payroll, government subsidies, voluntary contributions, sin taxes, and transitional international assistance. A pilot program of 100,000 insured people (as a financial simulation), who are paying 300,000 IQD per year, was conducted and generated a practical funding base of 30 billion IQD/year. With the model scaled to the entire 1.5 million population, 450 billion IQD would be the annual output, which matches the recommended benchmark of health spending of the OECD at 7-9% of GDP.

The proposed Sulaymaniyah health insurance scheme offers an inclusive benefits package that includes general practice, hospital, preventive and chronic illness, maternal and child health, as well as mental illness and essential drugs. It focuses on cost-efficiency by implementing preventive strategies, such as, HbA1c testing of an average of 25,000 IQD compared to an average of 1.5 million IQD on diabetes hospitalization; equity and sustainability is through savings of 30-70% on generic drugs, income-based subsidies with an Equity Index of 0.8 within five years, and cost-sharing, at tiers 90, 70, and 50 % on GP visits, CT scans, and oncology drugs. With digital infrastructure and under the management of an autonomous Health Insurance Authority, the reform phased roadmap (Years 1–10) seeks to increase coverage, decrease out-of-pocket expenses, lengthen life expectancy, and establish a pattern of equitable and sustainable healthcare in Iraq and the Middle East.

Part One: Policy and Regulations

I. Introduction:

The health insurance plan proposed to Sulaimaniyah is aimed at establishing a sustainable, equitable, and effective model that can fulfil the health requirements of all the citizens in the city. The main aim of it is to make sure that everyone, irrespective of income, age, or social status, has access to the necessary health services without struggling economically (Taniguchi et al., 2021).

In an attempt to steer its development, the system uses international best practices on a number of proven models. The NHS of the United Kingdom provides some important lessons of universal, publicly funded healthcare. The effectiveness of the Bismarck model, which is practiced in Germany and Turkey, is explained by the fact that both the employer and the employee are required to contribute financially to the sustainability of the financial system. The Beveridge model, which is employed in the UK and Scandinavian nations, emphasises the advantages of merging preventive care and primary care into a publicly run system. In the meantime, the ambivalent position of the United States, which combines the elements of the public and the private, offers a lesson on the possibility of striking a balance between governmental control and involvement of the market. Lastly, preventive health recommendations in the CDC focus on the significance of proactive interventions in the health of the population, including vaccination, screening, and chronic illnesses, to lower both long-term expenses and enhance population health (Mohajer-Bastami et al., 2025).

Based on these models, five evident objectives have been developed in the system of Sulaimaniyah:

1. Universal coverage - All inhabitants will be licensed to health insurance, and no one will be left out based on monetary or social limitations.
2. Fairness in access - Health services will be given equitably with special focus on the vulnerable groups like children, the elderly, the unemployed and the displaced.
3. Cost-Effectiveness - The resources will be utilized in a wise manner that will work on prevention and efficiency in maximizing the health output and minimizing unnecessary spending.
4. Financial sustainability - The system will be based on a sound combination of the payroll contributions, government subsidies and strategic funding to make the system financially viable in the long run.
5. Openness to the public and the private sector - Co-operation between the government facilities and the providers in the private sphere will enhance capacity, quality of services and reduce the wait.

Overall, the given executive summary represents a health insurance vision of Sulaimaniyah that is both informed globally and adapted locally. This model will try to shield the families against devastating medical expenses, enhance healthy lifestyles, and establish a base of confidence in the healthcare system that will continue to support future generations by learning the lessons of existing systems and adapting them to the local context of the city (Collaborators et al., 2025).

II. Governance & Institutional Structure

A well-conceived health insurance system in Sulaimaniyah will be supported by a committed Health Insurance Authority (HIA), which will be under the auspices of the Ministry of Health of the Kurdistan Regional Government. This institution will play the broad role of policy maker, financial overseer, provider of regulation, and long-term system planner.

An effective governance structure not only assures functionality of a system, but also credibility to it by the citizens and stakeholders. This is why the HIA should be anchored on three pillars, namely inclusiveness, transparency and digital innovation (Collaborators et al., 2025).

1. Board Composition

The governing board must be a decent coalition of the various interests that are involved in the provision of health insurance. This includes:

- The representatives of the government are to protect the interests of the people and streamline the system in compliance with the national health policies.
- Clinical staff, making sure that the voice of the physicians, hospitals, and clinics is incorporated in decision-making.
- Representatives of insurance to introduce the knowledge of financial and risk management.
- The involvement of civil society organizations in the formulation and oversight of the system provides the citizens with a direct role.

This variety of representation acts as checks and balances, avoidance of domination by only one interest group and fulfils the function of ensuring that policies are relevant to the professional standards as well as the community needs.

2. Accountability and Transparency.

Governance should be open to ensure that people trust it. The HIA will release periodic reports (annually) to the community with a clear description of revenues, expenditure, health outcomes and challenges in the system. Besides, the authority is supposed to come up with an independent audit system and avenues of public comment. These checking mechanisms will strengthen the legitimacy of the system and will assist in making sure that the resources are utilized responsibly (Debie et al., 2022).

3. Digital Health Information Systems

The HIA will also introduce an elaborate digital health information system to track real-time performance according to international best practices. This includes:

- Electronic health records to follow up on patient care.
- Intelligent insurance cards to avoid fraud and duplication.
- Data dashboards for policymakers to gauge efficiency, quality of care and financial flows.

Digital governance not only enhances control but also enhances efficiency and precision, enabling the system to respond rapidly to emerging health requirements. Simply put, the management and institutional design of the health insurance system of Sulaimaniyah will be a robust, representative, accountable, and innovative digital infrastructure. Combined, these aspects will establish trust in the population, lead to the collaboration of stakeholders, and sustain the resiliency of this system on a long-term basis (Vicoveanu et al., 2025).

III. Population Coverage & Eligibility

The most crucial question as far as any health insurance system is concerned, is who is insured and under what circumstances. The foreign experiences bring good examples of the things to consider:

- **UK NHS (Beveridge model):** It is a universal coverage with all funds being taxed and all residents being automatically eligible to receive healthcare, no matter their input to insurance (Shishkin and Sheiman, 2023).
- **Germany/ Turkey (Bismarck model):** This is based on the social health insurance contribution, to be paid by the worker, employer, and government and contributions is made by those who cannot afford the contribution, who will be given subsidies (Shishkin and Sheiman, 2023).
- **United States (Mixed model):** Covers are fragmented, with employer-sponsored insurance, government plans, such as Medicare and Medicaid and optional private insurance coverage, and thus, both strong and unequal (2024).

Proposed Model for Sulaimaniyah: Hybrid System

Based on the advantages of these strategies, Sulaimaniyah will need to embrace a mixed system that promotes inclusiveness, equality, and sustainability:

- 1. Comprehensive Coverage of All the residents:** All people of Sulaimaniyah, regardless of their employment, self-employment, unemployment or displacement will be obliged to enroll in the health insurance program. This helps in avoiding the risk fragmentation and also securing healthy as well as high-risk population to the insurance pool.
- 2. Special Subsidies on Vulnerable Groups:** To avoid exclusion, the government will subsidies full or partial subsidies on the groups like:
 - Children, who should be cared about and prevented.
 - Old age citizens who tend to have an increased cost of healthcare.
 - To avoid establish gaps in cover whenever there is financial hardship, the unemployed people will be covered.
 - Displaced persons and refugees, who have realised that they are highly vulnerable.

This duality structure creates balance between equity and sustainability, and no one is left behind.

Coverage Rate Formula

The success of the system will be determined by the number of people insured as opposed to the total number of people who are eligible. The formula is:

Coverage rate = Insured people/The totality of the eligible people/100.

Example:

In the case 1,500,000 eligible citizens live in Sulaimaniyah and 1,350,000 of them are registered in the system:

Coverage Rate = $1,350,000 / 1,500,000 \times 100 = 90\%$

Target

In order to be considered as one of the global best practices and recommendations by the WHO, the target of the Sulaimaniyah should be at least 95 % population coverage in the initial five years of implementation. To reach this goal, intensive enrolment tactics, online registration platforms, and sustained outreach activities will be necessary to access marginalized people.

IV. Financing & Contribution Models (Darrudi et al., 2022)

The lack of a financial base will lead to the failure of a health insurance system. Funding will not only sustain the system, but also make it fair and able to offer universal coverage. It has been demonstrated through international models that a successful system is not based on one stream of funding but a combination, which distributes risk and provides resiliency when the economy is experiencing a fluctuation.

Revenue Sources

The revenue sources proposed to construct a balanced and reliable system to Sulaimaniyah include the following items:

1. Payroll contributions (Employers and Employees)

- The employers and the employees make a certain payment of the salaries as a contribution to the insurance pool.
- This is based on the Bismarck model in Germany and Turkey, guaranteeing constant revenue, which is related to economic activity.

2. Government Subsidies

- The subsidies are applied by the government to the groups who cannot afford it (unemployed, elderly, poor families and displaced persons).
- This process ensures fairness and the elimination of marginalisation.

3. Voluntary or Additional Coverage Premiums.

- Citizens will be able to buy additional coverage on services that are not essential or luxury (e.g., dental aesthetics, upgrade of private rooms, cosmetic procedures).
- This puts less pressure on the common pool but gives the consumers a choice.

4. Sin Taxes (Tobacco and Alcohol)

- Products that are harmful to health are charged with special excise taxes.
- Not only do these bring in money, but also deter bad habits, after successful cases have been witnessed in the European Union member states.

5. International Aid (First Phase)

- At the initial years of the system, start-up capital can be offered by financial support of developmental partners (e.g., WHO, World Bank, donor countries).
- This will assist in bringing initial infrastructure, training and investments on digital systems until the domestic model is self-sustainable in full.

Suggestive Rates of Contribution (Based on Germany and Turkey)

- Employees: 7% of monthly salary
- Employers: 7% of monthly salary
- Self-employed: 10% flat-rate contribution.

Since then, Government plays a significant role in the overall health insurance budget, with a particular emphasis on subsidies and coverage of vulnerable groups. This middle way solution shares the financial burden among all the participants and is just.

Financial Sustainability Indicator.

Health Expenditure Ratio is one of the indicators used to gauge the financial strength of the health system:

$$\text{Health Expenditure Ratio} = \frac{\text{Health Insurance Spending}}{\text{GDP}} \times 100$$

The ratio indicates the extent to which the city economy is being invested in health care.

Goal: 7-9 % of the GDP and this is the average of developed nations in the OECD. Being in this bracket means that the system is not overfunded to an extent that it is overburdening the economy.

Key Points about GDP:

- Gross, it has all production, without the deduction of the value of depreciation (wear and tear of machinery, buildings, etc.).
- Domestic refers to it only taking into account what is produced within the country/region.
- Product is anything that is produced goods (cars, food, clothes), services (healthcare, education, transport).

The reason why it matters in Health insurance:

- Percentage of GDP on health expenditure is used to determine the extent to which the economy is being allocated to health services.
- As an example:

Assuming GDP = \$10 Billion and Spending on Health Insurance = \$800 Million:

$$\frac{800,000,000}{10,000,000,000} \times 100 = 8\%$$

This is equivalent to 8% of the economy being expended on health care which fits in the OECD target range (7-9 %).

The Importance of This to Sulaimaniyah, such form of financing will provide:

- Equity - Each person gives what he/she can afford.
- Resilience - different sources of revenues minimize susceptibility to economic shocks.
- Sustainability - it complies with OECD standards which ensures international comparability and sustainability.
- Public trust - clear contributions and subsidies bring equity of perception and reality.

V. Benefits Package Design

Any health insurance system is defined by a well-designed benefits package. It establishes service rights of people, stipulates quality and access, and gives financial security by lessening the demands of paying by individuals at the point of care. In the case of Sulaimaniyah, the package should be affordable, comprehensive, and sustainable and should respond to the global best practices and local health concerns. The following are some of the basic elements that should be incorporated in the proposed package to Sulaimaniyah:

Essential Health Care Package (EHCP):

1. Primary Care

- Provided by community-based clinics and through family physicians.
- Has the direct interaction with the majority of patients, offers general medical care, referrals and continuing care of routine health requirements.
- This system minimizes the wastage of hospitals and establishes efficiency.

2. Hospital Care

- Covering emergency services, inpatient care (admission), and outpatient care (specialist consultations, procedures, diagnostics).
- Makes sure the patients receive lifesaving and special treatment when necessary.

3. Preventive Services

- Following CDC guidelines, it will cover vaccinations, routine screenings (e.g. cancer, diabetes, blood pressure), and early detection programs.
- Preventative care reduces the long-term expenses and enhances the health outcomes of the population.

4. Maternal and Child Health

- Particular attention to prenatal, childbirth, postnatal services, and child development.
- Lessens the rates of infant and maternal mortality that are the main public health indicators.

5. Chronic Disease Management

- Long-term coverage of long-term management of high-burden diseases like diabetes, hypertension, cardiovascular diseases, and cancer.
- Ensures that patients do not face expensive complications because they are able to take regular medication, monitoring and counselling.

6. Mental Health Services

- Combining psychological counseling, psychiatric treatment and community-based support programs. The individual appreciates mental health as a vital aspect of general well-being.

7. Medicines

- Supply of drugs on an Essential Drug List, after the WHO Essential medicines List, however, adjusted to local KRG needs.
- Fosters the cost-effective prescription and sensible use of medicines.

Equity Indicator: Out-of-Pocket Spending

One of the most important indicators of the package quality is the degree to which it alleviates the financial stress on households.

$$\text{OOP Expenditure} = \frac{\text{Household Expenditure on Health Services Points of Care}}{\text{Total National Health Expenditure}} \times 100.$$

- **Target:** The out-of-pocket spending must not go beyond the 20 percent of the total health spending according to the WHO benchmark.

An accomplishment of this will make sure that families do not enter into poverty because of medical expenses and that the insurance system is living up to its claim of financial security.

VI. Provider Payment Mechanisms (Pillay et al., 2020)

Medical payments directly affect care quality and efficiency and equity of care. The payment systems are not only able to define the distribution of resources, but also shape the provider behavior, patient experience and system sustainability. The international health systems employ various mechanisms, each having their strengths and weaknesses.

International Comparisons

1. United Kingdom (NHS)

- **Capitation:** In this system, general practitioners receive a fixed rate per registered patient, irrespective of the number of visits.
- **Performance-based incentives:** Extra compensation is tied to quality performance (e.g. vaccination rates, chronic disease management).
- **Strength:** Promotes the continuity of care and preventive health.
- **Challenge:** Under-service in case of poor monitoring of payments.

2. Turkey

- **Global budgets:** Hospitals are given a sum of money that is used to cover general operating expenses.
- **Fee-for-service hybrid:** Selectively adopted in certain procedures to keep the activity levels.
- **Strength:** Flexibility against cost control.
- **Challenge:** Will need high monitoring to avoid excessive spending or redundant services.

3. United States

- **Diagnosis-Related Groups (DRGs):** Hospitals receive a fixed charge depending on the diagnosis and care type as opposed to the duration of stay.
- **Value-based care: Value-based care:** Providers are compensated based on the results (e.g., lower readmissions, patient satisfaction).
- **Strength:** Promotes effectiveness and performance-based care.
- **Challenge:** Difficult to implement; needs good data systems.

Proposed Model for Sulaimaniyah

In order to integrate efficiency, fairness, and simplicity, Sulaimaniyah needs to consider the experience of blended payment systems in other countries and adapt it to the local context.

1. Primary Care: Capitation + Quality Bonus

- **Capitation:** Family physicians have their yearly payments based on the number of registered patients which ensures that there is consistency in funding the basic services.
- **Quality bonus:** Extra rewards are offered in case of attaining quantifiable results like vaccination rates, early chronic illnesses diagnosis, and patient satisfaction.
- **Benefit:** Promotes preventive medicine, long-term relationships between the patients and the doctors, and avoidable visits to hospitals.

2. Hospitals: DRG-Based Payment

- Hospitals are being recharged as Diagnosis-Related Groups (DRGs) which implies that payment is made according to the kind of diagnosis and not on the days of hospitalization.
- This helps to cut down on expenses by deterring unwarranted extended hospitalisation.
- **Benefit:** Facilitates efficiency, uniform payment and can benchmark between hospitals.

3. Private Sector: Contract-Based Reimbursement

- The Health Insurance Authority (HIA) will have a formal contract with the private clinics and the hospitals.
- The payment will be associated with the agreed packages of service and controlled tariffs to prevent the overcharging.
- **Benefit:** Capacity building by taking advantage of the private providers and maintaining equality and cost effectiveness.

Why This Matters for Sulaimaniyah

The following are some of the key objectives of this mixed system:

- **Efficiency:** DRGs and capitation deter unwarranted procedures and stay in hospitals.
- **Equity:** There is equal standard between the public and the private providers and no over pricing.
- **Quality:** Incentives do not only encourage more but also greater outcomes among the providers.
- **Sustainability:** It is the predictable payment structures that can ensure the overall costs remain within planned budgets.

VII. Information Systems & Digital Health (Abernethy et al., 2022)

It is impossible to have a modern-day health insurance system without a strong digital infrastructure. The nervous system of healthcare financing is information systems, it enables real-time follow-ups, eliminates fraud, enhances efficiency, and enables patients to access care with ease. In the case of Sulaimaniyah, the digital health infrastructure is not a luxury but a strategic need.

Core Components

1. HIM Integrated Electronic Health Record (EHR) System.

- The digital health record of each insured individual will be linked and include their primary care physician, hospitals, pharmacy and laboratories.
- EHRs ensure continuity of care by ensuring the availability of patient histories throughout the service delivery points. This reduces the number of redundant tests and medical errors.
- This has been a successful way in the UK and Scandinavian countries where EHRs form the foundation of universal health systems.

2. Smart Insurance Card System (Turkey Model)

- Citizens People will receive an individual insurance card, similar to the SGK in Turkey.
- The card will store vital health and insurance details, and one can easily review their eligibility and bill.
- It reduces fraud since it links patients with their benefits package.

3. Real - Time Claims Monitoring

- All claims will be received by the Health Insurance Authority (HIA) electronically by the hospitals, clinics, and pharmacies.
- Automated monitoring systems will flag problems like duplicate claims, service use that is higher than normal, or overbilling.
- This stops money from leaking out and makes people more responsible.

4. Data Protection and Privacy (GDPR Alignment)

- Patient data is one of the most private types of information.
- The automated monitoring will give warning about issues such as duplication, overuse of services, and overbilling.
- This prevents the leakage of money and renders people more responsible.

Key Indicator

Digital Integration Indicator = Number of providers connected to EHR system / Total number of providers × 100

- **Target:** By the fifth year, all healthcare providers in Sulaymaniyah should be linked to the same digital system.
- The progress will be monitored periodically (annually) with milestones set, i.e. 40% at the end of Year 2, 70% at the end of Year 3 and 90% at the end of Year 4.

The significance of this to Sulaimaniyah.

- **Efficiency:** Digital systems simplify processes, reduce paperwork, and save time for both the patients and the providers.
- **Equity:** Equal digital access ensures that every citizen is equal, regardless of where they are based and how much they earn.
- **Transparency:** Monitoring in real time is a way of preventing fraud and misappropriation of funds.
- **Trust:** Individuals feel secure that their personal health data is secure due to high data protection legislation.

Digital health infrastructure is not merely a tool, but the engine that will cause universal coverage in Sulaimaniyah to become a reality. It will bring the system smarter, faster and fairer.

VIII. Quality Assurance & Accreditation

Quality and safety are the key features of the success of any health insurance system. The lack of financial coverage is meaningless without patients being able to believe the care they get is not only safe and effective but also respectful. In the case of Sulaymaniyah, the creation of a robust system of quality assurance and accreditation will be a key to developing credibility and ensuring that the system will enhance the health outcomes and the experience of the patients.

1. Provider Accreditation Standards

- All hospitals, clinics, and pharmacies under contract of the insurance system will be subject to the requirements of the accreditation according to the Joint Commission International (JCI) regulations, which are accepted in the global arena.
- The accreditation will include such important aspects as:
 - Clinical governance
 - Safety and hygiene of the facilities.
 - Qualifications of staff and staffing.
 - Emergency preparedness
 - Medication management
- The facilities, which do not comply with the minimum standards, will not be reimbursed until the corrective measures are implemented.
- This gives uniformity, responsible and open confidence both in the providers in the public and in the private.

2. Patient Safety Indicators

The system will follow a list of patient safety indicators to trace the quality status and draw attention to the areas of improvement. These include:

- Mortality rates – the number of deaths that can be avoided in hospitals and clinics.
- Readmission rates – the number of times patients come back to hospitals with the same issue, which is an indicator of quality care.
- Infection rates – keep track of hospital-acquired infections, e.g., sepsis or post-surgical infections.
- Adverse events – finding medical errors, delayed diagnosis, or medication errors.

Frequent monitoring of these indicators will enable the Health Insurance Authority (HIA) to acknowledge high-performing providers and demand corrective action by the underperforming providers.

3. Patient Satisfaction Surveys

- In addition to technical interventions, the voice of patients is important.
- The system will administer an annual survey of patient satisfaction to capture the following experiences:
 - Waiting times
 - Healthcare staff communication and respect.
 - Facility Cleanliness and comfort.
 - Confidence in treatment decisions.
- Findings will be made available to everyone, and this will increase transparency and encourage providers to become better. The reason this is important to Sulaymaniyah.

Why This Matters for Sulaimaniyah

A quality-based health insurance system can provide three significant advantages:

1. Better health outcomes – reduced mistakes, infections, and avoidable deaths.
2. Stronger trust – patients are convinced that their care is respectful and safe.
3. Efficient use of funds – insurance funds will be channeled to those providers who are reliable and offer quality services.

In summary, quality assurance and accreditation make the financial coverage a meaningful health coverage. In the case of Sulaymaniyah, this will play a central role in developing a system that is utilized by the people and also one that the people believe in.

IX. Risk Pooling & Equity Mechanisms (Hibbert et al., 2023)

The key to a just health insurance system is the concept of risk pooling. Healthcare is not predictable, as some people do not need much assistance in a certain year, whereas others might have to pay insane prices. The sick and the poor would have an inappropriate financial burden without pooling. In the case of Sulaymaniyah, the risk pooling will cover the costs of sickness spread out among the society so that the most vulnerable are taken care of and there is community building.

1. National Risk Pool

- All contributions from employees, employers, self-employed individuals, and government subsidies will flow into a single national pool managed by the Health Insurance Authority (HIA).
- E.g. this pool enables cross-subsidization:
 - The healthy support the sick – so that no one can be left behind in case of chronic illnesses.
 - The wealthy support the poor – ensuring equal access to everyone irrespective of their earnings.
 - The young support the elderly – equalizing the demographic.
- The system also ensures that all insured populations are united to eliminate the problem of fragmentation as well as ensuring penetration of all the private insurers by the low-risk individuals.

2. Equity Index Formula

As a way of monitoring equity in service distribution, the system will monitor an Equity Index:

Equity Index = Health service utilization of the lowest income quintile / Health service utilization of the highest income quintile.

- When the lowest-income group utilizes health services almost equally to the highest-income group, the index is close to 1.0, and this demonstrates good equity.
- When the index is significantly smaller (e.g. 0.5), this means that there are impediments to the poorer groups accessing care.

3. Target for Sulaimaniyah

- **Equity Index** ≥ 0.8 within the first 5 years of implementation.
- This means that the poorest 20% of the population should be using at least 80% of the services accessed by the richest 20%.
- Achieving this will require targeted subsidies, outreach in rural and low-income neighbourhoods, and integration of displaced populations into the insurance system.

The importance of this to Sulaimaniyah.

- **Fairness:** No citizen ought to be refused care due to his/her income, age, or health status.
- **Public trust:** An open pledge towards equality reinforces trust towards the system.
- **Health outcomes:** Decreasing inequality will enhance population-wide measures of life expectancy and maternal/child health.
- **Social cohesion:** When all contribute and share benefits equally, the insurance system will be an image of mutual responsibility and solidarity.

X. Public–Private Partnerships (PPP) (Basabih et al., 2022)

In Sulaimaniyah, the role of the private health sector is significant, and currently, a large percentage of patients are already provided with well-equipped hospitals, specialised clinics, and diagnostic centres. This capacity should be incorporated in the system of health insurance to establish an effective system, as opposed to allowing it to operate freely or compete with it. Thoughtfully implemented Public-Private Partnerships (PPPs) will enable the system to tap into the resources of the private sector, relieve the burden on taxpayer facilities, and provide citizens with more options - without making the system too expensive or unfair.

1. Outsourcing the services of a Private Hospital due to overflow capacity.

- In many cases, the public hospitals are overwhelmed, have long queues and scarce specialized services.
- Health Insurance Authority (HIA) has the opportunity of contracting the services of private hospitals to add capacity, particularly when the services are in high demand, e.g. surgeries, diagnostics and specialist consultation.
- Contracts will:
 - Establish service packages to be included in the insurance system.
 - Get reasonable reimbursement rates to avoid overcharging.
 - Having the same quality and accreditation requirements imposed on the private hospitals as on the public providers.
- This strategy is in line with the practice in Turkey and most of the European Union countries, where the private service providers are an extension of the state system.

2. Promoting Private Supplemental Insurance.

- Although the basic health insurance package will ensure the basic services to all the citizens, those who would desire to take non-essential or luxury services can take extra personal insurance.
- Examples include:
 - Dental aesthetics (e.g., cosmetic dentistry).
 - Individual room in the hospital and lesser waiting.
 - Plastic surgery and cosmetic.
- With this additional layer permitted, there will be a balance:
 - Citizens have the freedom to opt for improved services.
 - The social insurance fund is safe, as basic benefits are insured irrespective of individual preferences.

3. Selection Use of Regulation to Privatised Insurers to Prevent Adverse Selections.

- Some of these dangers of privatization include adverse selection to favour the healthy or the rich, abandoning the state system with expensive, risky patients.
- To avoid it, the HIA will introduce strict rules:
 - There is a mandatory enrollment in the public insurance pool prior to the purchase of the private add-ons.
 - Regulations preventing duplication of essential cover by the private insurance.
 - Financial control to make sure that the private insurers pay their fair share to risk pooling in the system.

The Significance of This to Sulaimaniyah.

- **Increased capacity:** This is when the system is increased by the presence of private hospitals to serve the demand, particularly at the peak period or even during a crisis.
- **Efficiency:** Competition promotes better quality and responsiveness of services by the providers.
- **Regulation:** Regulation guarantees that the participation of the private sector by the wealthy is beneficial to all and not just the rich.
- **Sustainability:** Supplementary private insurance will decrease the burden on the communal pool without compromising on coverage.

XI. Cost Control/Efficiency Measures (Aborode et al., 2025)

The health insurance systems are under a permanent strain due to the escalating costs as a result of the emerging technologies, high-cost medications, and the growing demand for services. Without proper management, these expenses may soon run out of control and lower the coverage or increase out-of-pocket expenses among citizens. The system at Sulaimaniyah will need to implement the best practices in the world in order to gain long-term sustainability through embracing the best cost control and efficiency strategies.

1. EU Model: Generic Drug Substitution Policy.

- In most nations, the default option is generic drugs (chemically identical to brand-name drugs, but much cheaper), which are offered instead.
- Pharmaceutical expenditure has been cut substantially by EU countries, including France and Germany, by obliging pharmaceutical companies to use generic substitution.
- For Sulaimaniyah:
 - Doctors will have to prescribe in a generic name and not a brand name
 - Pharmacies have to fill the cheapest equivalent so long as a particular medical cause cannot substitute it.
- Advantage: Saves 30-70% of the cost of drugs, thus making drugs affordable to patients and the insurance pool.

2. Centralized Procurement (SGK Model of Turkey)

- Turkey Social Security Institution (SGK) centralized purchasing negotiates on the reduction of prices on medicines, medical equipment, and hospital supplies.
- For Sulaimaniyah:
 - Health Insurance Authority (HIA) will develop a national procurement agency.
 - The system will have bargaining power due to bulk purchasing, which will lower the prices due to economies of scale.
 - There will be transparent tendering procedures to reduce the risks of corruption.
- **Benefit:** Guarantees constant access to necessary drugs and equipment at the most affordable price.

3. Gatekeeping (Family Physician as Entry Point - NHS Model)

- In the UK NHS, patients do not have direct access to specialists without a recommendation from a family physician.
- This gatekeeping system minimises hospital care wastage.
- For Sulaimaniyah:
 - All residents will be registered with a doctor in the family.
 - That physician must refer to non-emergency hospital visits.
- **Advantage:** Influences preventive care, enhances primary wellness, and decreases overcrowding in hospitals.

4. Preventive Care Priority (CDC Guidelines).

- Prevention, like vaccinations, screenings and lifestyle education, is much cheaper in comparison to the treatment of the advanced conditions.
- As an example, a tiny fraction of the vaccination cost of the children against measles is used to treat the disease complications.
- Preventive care will consist of the following, as per CDC requirements:
 - Vaccination initiatives across the entire world.
 - Early screening (diabetes, hypertension, cancers).
 - Nutrition, tobacco, and exercise campaigns in healthcare.
- **Benefit:** Minimizes future impact of chronic and infectious illness, which helps save money and increase health outcomes.

The Importance of This to Sulaimaniyah

These actions guarantee the system is not cost-cut to a point where the quality of the services can be compromised:

- **Affordability:** The generic substitution and the bulk buying reduce the cost of medicines and supplies.
- **Efficiency:** Gatekeeping makes sure the services are provided at the appropriate level of care.
- **Prevention:** Preventive health lowers future expenditure and improves the quality of life.
- **Trust:** Open procurement and cost-saving policies boost public confidence.

XII. Monitoring and Evaluation M&E Framework (Danforth et al., 2023).

The health insurance system is not something that should be built, but it must be measured, calculated and made better each time. In the absence of monitoring and evaluation (M&E), inefficiencies remain unnoticed, inequity exists, and resources are prone to being wasted. In the case of Sulaimaniyah, an excellent M&E framework will act as the compass towards achieving the long-term objectives of universal coverage, equity, and sustainability of the system.

1. Key Performance Indicators (KPIs)

The following quantitative and qualitative indicators will be used to measure the system's performance. Each KPI provides insight into a fundamental focus of the health system:

Coverage Rate (%)

- Percentage of residents who have health insurance.
- Target: $\geq 95\%$ by Year 5.

- Out-of-Pocket Expenditure (%)

- Follows percentage of health spending by households.
- Target: $\leq 20\%$ (WHO benchmark).

- Health Expenditure as % of GDP

- The proportion of the city economy allocated to healthcare.
- Target: 7–9 % of GDP (OECD standard).

- Average Waiting Time for Services

- Indicates availability and affordability of health care (primary and hospital care).
- Target: Reduction of waiting times by 30% within 5 years.

- Hospital Bed Occupancy Rate (%)

- Demonstrates the effectiveness of the use of resources in hospitals.
- Target: 75-85% occupancy (not under-utilised or overcrowded).

- Maternal and Infant Mortality Rates

- Central health system outcome indicators.
- Target: Gradual alignment with upper-middle-income country averages.

- Life Expectancy at Birth

- A general population health outcome indicator indicating the system-wide gains.
- Goal: Grow by 3 or more years in 10 years of implementation.

2. Evaluation Cycle

The system will be based on a 2-tier evaluation cycle to provide accountability and ongoing improvement:

Annual Reporting

- The Health Insurance Authority (HIA) will release a detailed report on finances, service usage, quality indicators and patient satisfaction every year.
- Publicity will be done to make reports publicly accessible to promote transparency and trust.

Five-Year Strategic Reviews

- An independent evaluation will be done on whether the system is achieving its long-term objectives every five years.
- This review will include:
 - Detailed data analysis of KPIs.
 - Qualified financial sustainability audits.
 - Healthcare provider, civil society, and citizen consultations.
- According to the review, policies are going to be revised, financing is going to be changed, and new targets are going to be established.

The Importance of this to Sulaimaniyah

- **Accountability:** Citizens and stakeholders will be able to understand the way their input is being utilised.
- **Continuous improvement:** Issues are detected at an early stage and rectified before they turn into be crisis.
- **Evidence-based policy:** Decisions made are not based on politics or assumptions but on data.
- **Public trust:** The transparency of reporting increases trust in the system and leads to participation.

XIII. Legal & Regulatory Framework (Moramarco et al., 2020)

The laws and regulations that uphold a health insurance system make it as strong as possible. Without proper regulations, there is a chance of corruption, inefficiency and disappearance of popular trust in the system. In the case of Sulaimaniyah, the legal and regulatory structure should ensure that there is fairness, accountability, and safeguarding of the rights of the patients and offer the institutional power to implement it effectively.

1. Health Insurance Act (KRG Parliament)

- The system is based on a Health Insurance Act, which will be adopted by the Kurdistan Regional Government (KRG) Parliament.
- This legislation will:
 - Having the Health Insurance Authority (HIA) as a regulatory body independent of the ministry of Health.
 - Establish eligibility, contribution levels, benefits, and ways of financing.
 - Compel everybody to participate to have equal risk pooling.
 - Define the role and responsibility of the government, the private providers and insurers.
- The act will give the system longevity and make it legally enforceable by anchoring the system in the law.

2. Data Protection and Patient Rights Law

- Healthcare data belongs to the category of the most sensitive personal data. Confidentiality, consent, and security will be guaranteed by a special legislation.
- Obvious patient entitlement to their health information.
- Modeled on the EU's General Data Protection Regulation (GDPR), the law will include:
 - Clear patient rights to access their health data.
 - Immediate restrictions on the utilization and exchange of information by the insurers, hospitals, and providers.
 - Disciplinary measures when data is breached or when an individual illegally uses patient records.
- Legal rights of patients will also be guaranteed which include:
 - Equal treatment of access to care.
 - Right to second opinions and informed consent.
 - Guarantee against unfair refusal of services.

3. Anti-Fraud and Corruption Measures

- Fraud Health systems are at risk of fraud, such as false claims, billing manipulation, and unnecessary procedures, in all countries of the world.
- To safeguard the financial sustainability, the law will create:
 - The HIA has an anti-fraud unit.
 - Monitoring of claims in real-time by use of digital systems.
 - Random audits of all providers as well as mandatory audits of high-cost providers.
 - Penalties against fraudulent claims or collusion by criminal prosecution.
- These will also offer protection since only valid services will be paid, they will protect the insurance pool and the patients.

4. Office of the Ombudsman of Complaints is an independent authority.

- The system will have an independent ombudsman office to enhance the level of trust among the people.
 - This body will:
 - Take and probe patient complaints on access or billing or quality of care.
 - Give provider and insurers issue binding recommendations where necessary.
 - Issue patient and system fairness annual reports.
- The presence of the ombudsman will also serve as a champion of justice and transparency in the health insurance system because citizens will have a direct voice.

The importance of this to Sulaimaniyah

- **Legitimacy:** A Health Insurance Act makes the system supported by the law, but not politics.
- **Trust:** The system is credible as the citizens regard the patient rights and independent oversight.
- **Integrity:** The limited resources are safeguarded by anti-fraud and anti-corruption measures.
- **Sustainability:** There is a clear law, a continuity between governments and administrations.

XIV. Implementation Roadmap (Chaudhuri et al., 2022)

Changing policy to practice in health insurance will need a clear roadmap that is progressive. The effort to establish universal coverage in one step would overburden the system and destroy the confidence of the population. Sulaimaniyah must instead move stepwise, with institutional foundations and pilot projects and gradually expand the coverage and capacity. This is a bold but achievable plan, and it will result in short-term victories and long-term success.

Phase I: Years 1–2 Foundation and Pilots

- Establish the Health Insurance Authority (HIA):

- Hire management and technical personnel.
- Establish regulatory frameworks, funding mechanisms and law.

- Pilot Projects:

- Pilot test digital systems, provider payment systems, and enrollments in selected districts of Sulaimaniyah.
- Develop lessons to perfect the national roll-out.

- Digital Infrastructure:

- Use electronic health records (EHRs), intelligent insurance records and software to track claims.
- Have simple, basic cybersecurity and data protection measures.

- Public Campaigns Communication:

- The second category of communication initiatives is through public awareness initiatives, through campaigns.

Phase II: Years 3–5 Expansion and Integration

- Expand Coverage:

- Gradually grow enrollment until it covers the vast majority of the residents, with a goal of 80-90 % by Year 5.
- Introduce subsidies for the vulnerable groups (old age, unemployed, displaced people).

- Integrate Private Sector:

- Contract with individual hospitals and clinics to add to service capacity.
- Pioneer controlled additional secondary insurance on non-essential services.

- Minimize Out-of-Pocket (OOP) Expenditures:

- Progressively increase the benefits package of the essential services to include most of the high-cost services.
- Adopt price controls and generic replacement measures on drugs.

- Strengthen Monitoring:

- Publish the annual system-wide system performance report, which consists of KPIs, like coverage, expenditures, and patient satisfaction.

Phase III: Years 6–10 Consolidation and Global Standards

- Attain Full Universal Coverage:

- Register all eligible resident populations, including the target population of 95% coverage.
- Assure the vulnerable groups that they are well integrated and shielded.

- International Accreditation:

- Seek Joint Commission International (JCI) or other similar accreditation for major hospitals.
- Compare the system with OECD standards of equity, efficiency and quality.

- Advanced Preventive Care:

- Completely adopt CDC preventive programs (vaccination, screening, chronic disease prevention).

- System Optimization:

- Optimize payment arrangements, enhance provider productivity and decrease unnecessary hospitalization.
- Prepare the advanced care, such as the specialized tertiary hospitals and telemedicine.

Importance of this Roadmap to Sulaimaniyah.

- **Realism:** Successes and communication campaigns in the early pilot stages develop trust in people.
- **Trust:** Early pilot successes and communication campaigns build public confidence.
- **Sustainability:** The gradual adjustments in terms of financing allow the government and households to adjust.
- **Global Alignment:** By Year 10, the system will not only offer universal coverage, but also satisfy international quality and equity;

XV. Risk Assessment (AlJohani and Bugis, 2024)

Any major reform has risks associated with it. A health insurance system in Sulaimaniyah will demand health insurance on a large scale in terms of politics, finances and social change. Anticipating the possible challenges will enable the policy makers to come up with measures to curb the risks, so that the risks may not become obstacles to success.

1. Political Instability Risk

- **Challenge:** Political changes, instability or non-consent of various parties may slow or disorient implementation.
- **Impact:** Threat of uneven policies, lax execution, or stagnated reforms.
- **Mitigation:**
 - Pass a Health Insurance Act by the KRG Parliament, with a binding law system that cuts across political regimes.
 - Establish cross-party agreement by including all political players in the planning process.
 - Create a Health Insurance Authority (HIA) that is independent and free of politics.

2. Financial Sustainability Risk

- **Challenge:** An increase in healthcare expenses, recession, or low compliance of contributions may jeopardize the sustainability of the system in the long term.
- **Impact:** A decrease in benefits, higher out-of-pocket (OOP) spending or budget deficits among citizens.
- **Mitigation:**
 - Squeeze the stone (payroll contributions, subsidies, sin taxes, supplementary insurance).
 - Implement cost-controlling strategies, including generic drug replacement, centralized buying and gatekeeping.
 - Review regularly contribution rates and government subsidies so that there is a balance with GDP growth.
 - Carry out an external audit to provide transparency and efficiency in expenditure.

3. Provider Resistance Risk

- **Challenge:** Hospitals, physicians, and independent clinics might oppose reforms, including new models of payment and accreditation, or tougher regulation.
- **Impact:** Delays in the participation of the providers, decline in the quality of the services or conflict that might occur.
- **Mitigation:**
 - Adopt a gradual implementation strategy with pilot projects, which will enable the providers to change.
 - Provide quality improvement training and rewards.
 - Create frequent communication forums between providers and the HIA to discuss the issues early.
 - Find a way to recognize and reward the high-performing providers through monetary rewards.

4. Public Trust Issues

- **Challenge:** Citizens will lack trust in the system as they might have experienced inefficiencies in the previous forms of the public service, or they may fear corruption, or they are not aware.
- **Impact:** Low enrolment, unwillingness to make compulsory contributions or use out-of-pocket expenditure.
- **Mitigation:**
 - Publicity Launch publicity campaigns on the merits, rights, and protection of the system.
 - Make visible improvements (e.g. free basic medicines, shorter waiting line) early, and establish credibility.
 - Make annual reports to the public transparent and available, demonstrating the use of contributions.
 - Establish an independent ombudsman to receive complaints and exercise accountability.

Why This Matters for Sulaimaniyah

Risk management does not mean to do away with everything, but to foresee them and get ready. Integrating the concept of resilience into the construction of the system will allow Sulaimaniyah to cushion its health insurance system against external shocks, financial strain, or the decline of trust among people.

Part two: implementation plan and financial focus

1. Health Insurance Implementation Plan

(Sulaymaniyah Governorate – Financial Focus)

Background

Sulaymaniyah Governorate is among the most developed regions in the Kurdistan Region of Iraq, and it does not have a system of health insurance in place. Out-of-Pocket (OOP) spending is a predominant component of healthcare financing, typically accounting for over 70% of overall health expenditure. Such reliance on direct payments puts households at the mercy of disastrous spending, leaving many households in poverty when it comes to chronic illness, emergency surgery or treatment of cancer.

Problem Statement

The absence of risk pooling means that the cost of illness is unfairly distributed among the ill and the poor. It will take a family with a single episode of hospitalization or even advanced imaging (e.g. MRI at 200,000-300.000 IQD or PET-CT at 1.52 million IQD) to spend all the monthly or annual earnings. The elderly, the unemployed and displaced persons are considered vulnerable groups because they have high chances of financial ruin.

Rationale

The implementation of a health insurance scheme brings about solidarity and pooling of risks where the healthy people take care of the sick and the rich to take care of the poor. The experience of Turkey, Jordan and Iran indicates that the model of hybrid financing using payroll contributions, subsidies as well as co-pays is sustainable. In the case of Sulaymaniyah, this model would enhance equity, cost-efficiency, and preventive care and limit OOP expenditure to the recommended target of WHO of $\leq 20\%$.

Objectives

The objectives of this plan are to:

1. Determine the viability of the health insurance introduction in Sulaymaniyah.
2. Compare its cost-effectiveness with local and international real tariffs.
3. Establish a hybrid financing mechanism in line with the OECD sustainability ratios (7-9 % of GDP).
4. Offer a timeline of implementation to cover a population of $\geq 95\%$ in 10 years.

2. Financial Plan (Guitouni et al., 2024)

Revenue Sources, Hybrid Model

A financially sustainable health insurance system design is a system that involves a variety and combination of balanced funding sources. That dependence on one source introduces an economy of volatility to the system, and as such, the best practice in international countries suggests that there should be a hybrid model which spreads the burden of responsibility equally among individuals, employers, government and external partners.

1. Payroll Contributions (Employers and Employees)

- Payroll Contributions (Employers and Employees): 7% of the monthly salary will be paid by employees, together with the same amount by employers.
- This is in place to make sure that healthcare funding is based on economic productivity, as is the case with the Bismarck model in Germany and Turkey.
- Example: In case the employee makes 1,000,000 IQD/month, the contribution equals:

$$1,000,000 \times 0.07 = 70,000\text{IQD from employee} + 70,000\text{IQD from employer} = 140,000 \text{ IQD /month}$$

This translates to 1,680,000 IQD per employee to the insurance pool annually.

2. Self-Employed Contributions

- A flat 10% contribution on reported income every year will be imposed on self-employed employees.
- This process will avoid the exclusion of independent professionals, traders, and small business owners so that all productive groups will be involved in risk-pooling.

3. Government Subsidies

- Government spending will be used to fund approximately 20% of the total budget, and the funds will be directed towards vulnerable groups like old people, the unemployed, and displaced individuals.
- Such a subsidy defends equity, as no one will be deprived of care because of his or her inability to pay.

4. Sin Taxes

- Tobacco and alcohol duty has two purposes: to deter bad habits and to generate a source of constant revenue.
- Illustration: Assume that the taxes charged on a pack of cigarettes increase to a total of 1,000 IQD, and 200 million packs of cigarettes are consumed each year, the revenue = 200 billion IQD/year.
- These taxes are effective in not only promoting health to society but also generating funds in the EU and Turkey.

5. Voluntary Supplementary Insurance

- Supplementary coverage can be bought by citizens who need luxury or non-essential services (e.g., cosmetic surgery, hospital room on a private basis, dental aesthetics).
- This will ease the strain on the common insurance pool, and it will conserve consumer choice and equity.

6. International Aid (Initial Phase)

- In the initial years, technical and financial assistance will be offered through development partners, e.g., the WHO, the World Bank or donor nations.
- This funding will put the system on its feet as it goes through its painful start-up period-particularly with digital infrastructure, claims systems and training of staff.

Projected Premium Pool

The financial stability of the system is pegged on enrollment and compliance. Based on realistic projections, the first and scaled scenarios are:

- Initial Pilot Phase (100,000 insured):

$$100,000 \times 300,000 \text{ IQD/year} = 30 \text{ billion IQD annually}$$

- Full-Scale Coverage (1.5 million residents):

$$1,500,000 \times 300,000 \text{ IQD/year} = 450 \text{ billion IQD annually}$$

This incremental scaling can enable the system to grow in a gradual and sustainable manner without resulting in fiscal shocks but can already show beneficial results.

Target Health Expenditure Ratio

The Health Expenditure Ratio is one of the most important indicators of sustainability because it is the ratio of total health insurance spending to Gross Domestic Product (GDP).

$$\text{Health Expenditure Ratio} = \text{Health Insurance Spending/GDP} \times 100$$

- **Example:** If Sulaymaniyah's GDP = 10 trillion IQD, and annual insurance spending = 800 billion IQD:

$$800,000,000,000/10,000,000,000,000 \times 100 = 8\%$$

- This is within the range of OECD of 79.9% which is the right level of healthcare investment and stability in the economy.

Why This Matters

- **Equity:** The contribution is based on income, and those who are vulnerable should be supported by the government.
- **Stability:** A variety of sources of revenue reduces the reliance on one.
- **Sustainability:** Stability to the OECD standards translates to long-run fiscal sustainability.
- **Public Trust:** Open contribution-sharing builds a feeling of equality and shared responsibility.

On the whole, this hybrid financial scheme is the backbone of the health insurance system in Sulaymaniyah, whereby the funds are pooled fairly, mobilized sustainably, and utilized efficiently to offer universal health cover.

3. Financial Justification & Cost-Effectiveness (Han et al., 2024)

Introduction

One of the key tenets of any health insurance system is that it must be financially justified, that is, it should be able to offer meaningful health protection at an affordable price that is sustainable both to the individuals and the government and society as a whole. Sulaymaniyah, where Out-of-Pocket (OOP) payments are now the leading health financing method, transitioning to the pooled financing system must be accompanied by a new understanding of revenue generation and a solid demonstration of value.

Cost-effectiveness guarantees that limited financial resources can accomplish the best possible health, whereas cost-benefit analysis shows the actual economic savings in terms of avoiding preventable diseases, hospitalizations and other less expensive substitutes like generic medications.

The local hospital tariff, necessary drug list, and international standards evidence-based testifies to the fact that the preventive and primary care intervention costs are much lower than the advanced curative interventions. In this section, the financial rationale of the Sulaymaniyah health insurance system is justified; the costs of preventive and curative is compared, real cost-benefit illustrations are analyzed, and equity is incorporated so as to make the system fair.

Preventive vs. Curative Costs

The Case of Diabetes Management

Diabetes is one of the major causes of disastrous health expenditure. An HbA1c test, which costs 20,000-25,000 IQD, is a cost-effective screening device which can be carried out to detect and monitor the stability of blood sugar control.

In comparison, uncontrolled diabetes will frequently result in admission because of complications like diabetic ketoacidosis, kidney failure, or heart attack, which cost 1-2 million IQD each.

Formula:

Cost Saving Ratio = Hospitalization Cost/HbA1c Test Cost

Example:

$$1,500,000/25,000 = 60$$

→ One avoided hospitalization saves the cost of 60 HbA1c tests. Scaling across thousands of patients, the financial benefit is immense.

The Value of Generic Substitution

Generic drugs offer the same therapeutic value as branded drugs and at a significantly lower price. For example:

- Metformin (generic): 1,000–4,000 IQD per strip.
- Newer agents (e.g., Sitagliptin, Empagliflozin): 20,000–40,000 IQD per strip.

Savings Potential:

$\text{Saving \%} = \frac{\text{Brand Price} - \text{Generic Price}}{\text{Brand Price}} \times 100$

Example: $40,000 - 4,000 / 40,000 \times 100 = 90\%$

Generic substitution can save at least 30 -70 % of drug expenses, even on a conservative estimate. This policy itself would save billions of IQD per year, and the quality of care would remain.

Cost-Benefit in Practice

General Practitioner and Visits

In Sulaymaniyah, a general practitioner (GP) visit will cost 15,000-25,000 IQD. Within the proposed system, there will be 90 % subsidized coverage of physician visits, with a 10% co-payment.

This costing structure will inspire patients to receive care at an early stage and make fewer trips to the emergency departments because they cost 30,000 to 50,000 IQD to visit an emergency department. Cost-benefit: The subsidization of GP visits would reduce the downstream high-cost admissions and lead to better long-term outcomes.

Tiered Imaging Subsidies

Diagnostic imaging is both necessary and one of the most prevalent sources of skyrocketing healthcare expenses. A tiered approach will guarantee rational use:

- X-rays & ultrasound: Highly subsidized (85–90% coverage). Cost: 20,000–60,000 IQD.
- CT/MRI scans: Moderate coverage (65–70%). Cost: 150,000–300,000 IQD.
- PET-CT scans: Limited coverage (50%). Cost: 1,500,000–2,000,000 IQD.

This makes sure that the important imaging is available, yet this discourages the use of expensive advanced modalities.

High-Cost Oncology

The treatment of cancer is a significant problem. Normal chemotherapy medicines (e.g., Methotrexate, Cyclophosphamide) are 5,000-20,000 IQD/vial, and will be reimbursed in 80% insurance coverage. In comparison, targeted therapy (i.e., Trastuzumab) ranges between 500,000-2,000,000 IQD per cycle, and immunotherapy (i.e., Nivolumab) may go over 2-4 million IQD/cycle. These drugs should be covered by 50-60 % to provide the patient access and avoid sending the insurance pool to a collapse due to unsustainable spending.

Rationale: Tiered oncology coverage provides a balance between compassion and financial viability: patients get the necessary treatment, and some expenses will be spread out with the help of co-payments or additional insurance.

Equity Mechanisms

An Index of Fairness: Equity Index.

The Sulaymaniyah insurance model is equity-based. The Equity Index is a measure of the fairness with which the services of healthcare are being accessed across income groups:

- Equity Index = Utilization of lowest income quintile / Utilization of highest income quintile
- Target: ≥ 0.8 within 5 years.
- This implies that the 20% poorest population ought to be receiving at least 80% of the services the 20% richest population are enjoying.

Application Example

If the richest quintile uses 10,000 outpatient visits annually, equity demands the poorest quintile should achieve at least: $10,000 \times 0.8 = 8,000$ visits

The insurance system is actively bridging the utilization gap by introducing subsidies, targeted outreach and including displaced populations.

Equity in Medications

- **Essential generics:** Covered at 90–95%, ensuring access for all.
- **High-cost biologics:** Covered at 50–60%, but with subsidies for low-income cancer patients.
- The balance will make sure that no patient remains untreated due to financial limitations, but still maintain the sustainability of this system.

Long-Term Cost-Effectiveness

There is international evidence that primary care with a high level of preventative care and well-established primary care can lead to improved population health with reduced long-term costs. In the case of Sulaymaniyah, the suggested model will:

- Reduce OOP spending from $\sim 70\% \rightarrow \leq 20\%$ within 5 years.
- Preventive screening and GP gatekeeping can be used to avoid unnecessary hospitalizations.
- Make sure that it is sustainable due to generic substitution and tiered cost-sharing.
- Empower equity, which has been described in terms of the Equity Index and decreasing catastrophic expenditure.

After all, this system is not only a financial system, but one that is a social protection mechanism that would turn healthcare into a social right rather than a financial burden.

Conclusion

The economic credibility and ethical equity of the financial rationale on the health insurance of Sulaymaniyah are based on its economic rationality and ethics. Preventive measures such as HbA1c, the rational use of drugs in the form of generics, and early GP visits save much more than they cost. Imaging and oncology tiered subsidies do not overload the system and ensure that life-saving interventions are available. The model, providing Sulaymaniyah with equity mechanisms, guarantees that the poorest citizens get virtually equal service compared to the wealthiest, and creates solidarity and trust in the populace. Based on these reasons, the suggested insurance system becomes not just possible, but also revolutionary, as it establishes the basis of universal health coverage in the Kurdistan Region

4. Implementation Roadmap (Financially Anchored) (Doshmangir et al., 2021)

Introduction

Introducing a system of health insurance is not a technical reform, but a transformational process, which reorganizes the relations between citizens and government. In the case of Sulaymaniyah Governorate, the shift towards Out-of-Pocket financing to pooled, universal coverage should be gradual, financially based and socially adaptive.

The implementation roadmap will be organized in three stages over 10 years, balancing ambition and feasibility. Every stage presents well-sequenced reforms; instituting institutions, size of financial pools, personal capacity integration, and unifying international standards. The success of the roadmap will be determined by whether the roads are sustainably financed, the community trusts in it and whether there is a health improvement.

Phase I (Years 1–2) – Establishing the Foundations

Establishing the Health Insurance Authority (HIA)

The reform has taken a pillar in the establishment of the institution of the Health Insurance Authority (HIA), which is attached to the Ministry of Health of the Kurdistan Regional Government.

- Supervise policy, funding and control.
- Formulate legal systems, systems of contribution and subsidies.
- Make sure there is transparency with the annual report and independent auditing.

Launching Pilot Pooling Schemes

An initial enrollment of 100,000 insured residents will serve as the pilot. With each contributing an average premium of 300,000 IQD/year, the system generates:

$$100,000 \times 300,000 = 30 \text{ billion IQD annually}$$

This pool is a test of financial viability and gives a chance to monitor utilization, cost and quality of services closely.

Stakeholders Digital Infrastructure: Claims, Smart Cards, and EHRs.

Current health insurance relies on online resources:

- **Electronic Health Records (EHRs):** EHRs would allow continuity of care and reduce duplication of tests.
- **Smart Insurance Cards:** Check eligibility, reduce fraud and enable cashless transactions.
- **Digital Claims Monitoring:** Automates reimbursement of customers, raises (red) flags and charges.

Community Education & Community Building.

Community Public involvement is the key to financial survival. Awareness will help to make it clear: The benefits of pooled risk.

- Rights and entitlements of covered individuals.
- Accountabilities of contributions and co-payments.

Mistrust and resistance are avoided early on through transparency and engagement with citizens.

Short-term result: At the end of Phase I, Sulaymaniyah is to experience tangible improvement, i.e., a drop in OOP expenditure (currently standing at approximately 70%, down to up to 40%), the digital infrastructure will be used, and preliminary pilot outcomes will show cost-effectiveness.

Phase II (Years 3–5) – Expansion and Integration

Scaling Enrollment to 80–90% Coverage

Building on pilot success, enrollment expands to ~1.2 million residents. Assuming the same premium of 300,000 IQD per insured, the annual pool reaches:

$$1,200,000 \times 300,000 = 360 \text{ billion IQD}$$

This enlarged pool reinforces risk sharing and financial resiliency.

Integrating the Private Sector

There are many private hospitals, diagnostic centres, and clinics that are an important part of the health market in Sulaymaniyah. The capacity and service expansion require integration. Contracts will:

- Define tariffs and packages of services.
- Make it obligatory to adhere to the quality and accreditation standards.
- Make sure to pay justly to avoid overcharging.

Structured Co-Pays for Cost Sustainability

To prevent its overuse, a tiered co-pay will be added, particularly to high-priced services:

Advanced Imaging (CT/MRI):

- Advanced Imaging (CT/MRI): 20–35% co-pay.
- Elective Surgeries: 15–30% co-pay.
- PET-CT and biologics: 40–50% co-pay.

This level system is a compromise between access and sustainability.

Lessening the Out-of-Pocket (OOP) Spending.

The system aims to achieve a reduction in OOP spending from 70% to 20% of total health spending by increasing essential benefits (doctor visits, labs, chronic disease meds), which is targeted at meeting WHO benchmarks.

Medium-term outcome: By Year 5, Sulaymaniyah must achieve 80-90 % coverage, drastically decrease OOP burden and improve partnership between the private and the public sector.

Phase III (Years 6–10) Consolidation and Global Standards

Reaching 95% or greater Universal Coverage.

The system will cover at least 95 % of the population of Sulaymaniyah (approximately 1.5 million people) by Year 10. The premium pool is calculated in line with it:

$$1,500,000 \times 300,000 = 450 \text{ billion IQD annually}$$

$$1,500,000 \times 300,000 = 450 \text{ billion IQD annually}$$

Universal coverage means that there is no person who will be left out because of financial or social reasons.

Maintaining 7–9% of GDP for Health Spending

To maintain financial sustainability, health insurance expenditure must be maintained to 7-9% of regional GDP in line with the OECD standards.

Formula:

$$\text{Health Expenditure Ratio} = \text{GDP Health Insurance Spending} \times 100$$

Example: If GDP = 10 trillion IQD, spending = 800 billion IQD → 8%, a sustainable target.

Achieving International Accreditation

Large hospitals will seek accreditation by the Joint Commission International (JCI) or a similar accreditation. This ensures:

- **Patient safety standards.**
- Open-ended quality reporting.
- International Efficiency and equity international benchmarking.

Enhancing Preventive Care & Increasing Life Expectancy

By prioritizing screenings, vaccinations, chronic disease management, and maternal-child health, the system aims to:

- **Reduce premature mortality.**
- Extend life expectancy by + 3 years in 10 years.

Long-term outcome: Sulaymaniyah has universal coverage as well as international credibility, better health outcomes and fiscal strength.

Why This Roadmap Matters

- **Realism:** Staged reform avoids financial overload and guarantees a slow adaptation.
- **Trust:** Earlier victories (less expensive OOP, free life-saving medicine, easier access) gain public trust.
- **Equity:** Outreach and subsidies ensure the vulnerable populations are included.
- **Sustainability:** Co-pays, generic replacement and GDP-congruent expenditure maintain financial stability.
- **Global Alignment:** By Year 10, Sulaymaniyah is in line with the OECD standards, WHO standards and international accreditation.

Conclusion

By grounding the roadmap in a financial perspective, the health insurance will become a realistic vision, a sustainable reality. Piece by piece, Sulaymaniyah will transition to a coherent OOP financing to a universal, equitable and trusted system of health.

Phase I: establishes the base: governance, pilots, digital infrastructure and trust.

Phase II: Scales the system: increases the numbers enrolled, adds the participation of private providers, and implements co-payments.

Phase III: solidifies reforms: universal coverage, financial sustainability, and global acknowledgement.

In the end, this roadmap will make sure that healthcare is an entitlement, rather than a privilege, another shield to keep families, and a way to achieve health equity, as well as the future of the health sector in Sulaymaniyah financially stable.

5. Expected Benefits (Fan et al., 2024)

Introduction

The ultimate effectiveness of the health insurance system is not just determined by the effectiveness of its financing, but also by the real benefits it provides to citizens. In Sulaymaniyah, where primary health care has always been funded by out-of-pocket (OOP) expenditures, the transitional change to pooled insurance is likely to provide transformational social and economic effects.

The benefits will be realized progressively, the first one will be direct relief to the households, followed by the second one being medium-term benefits in terms of health indicators and the third one being long-term sustainability and equity. The section presents the anticipated benefits within three different horizons of the short-term (Years 13), medium-term (Years 56), and long-term (Years 610).

Short-Term Benefits (Years 1–2)

1. Immediate Relief in Out-of-Pocket Spending

At present, the OOPs payments constitute about 70% of the health expenditure in Sulaymaniyah, which is way exceeding the global average and the recommended WHO threshold. In the initial two years of implementation, subsidies on basic services (doctor visits, lab tests and key medicines) will decrease OOP burden to less than 40.

Example:

- An ordinary family can now afford to pay 500,000 IQD a month on medical treatment.
 - This reduces to 40% and gives 200,000 IQD per month to spend on food, education or housing.
- Such a temporary financial rescue will give people confidence and will demonstrate the value of the insurance system.

2. Subsidy of Basic Care is High.

The initial package of benefits is oriented towards high subsidies (85%-95%) on necessities:

- General practitioner and physicians' visits: 90% paid.
- Laboratory tests (CBC, HbA1c, lipid profile): 90–95% covered.
- Essential medicines (antibiotics, antihypertensives, insulin): 90–95% covered.

These subsidies are able to reduce household expenditure as well as promote the early treatment-seeking behaviour to avoid the expensive complications.

3. Building Public Confidence

Government-led initiatives are usually viewed with suspicion by the citizens because of their inefficiency. The system will build confidence and social legitimacy by bringing about quick wins, which are visible subsidies, lower hospital bills, and easy access to medications.

Medium-Term Benefits (Years 3–5)

1. Reduction of OOP to $\leq 20\%$ (WHO Benchmark)

A wider range of services will be paid out by the insurance pool, which will be expanded to accommodate approximately 1.2 million residents by Year 5. The proposed expenditure in OOP is estimated to decrease to $\leq 20\%$ of the total health expenditure, which is in line with WHO standards of financial protection.

Formula:

$$\text{OOP \%} = \text{Household health spending at point of care} / \text{Total health spending} \times 100$$

Target: $\leq 20\%$.

This makes sure that no family is affected by disastrous expenditure on health requirements.

2. Rates Falling Maternal and Child Death rates.

By subsidizing antenatal care, childbirth, vaccinations, and child development initiatives, the maternal and infant mortality rate is bound to decline to levels below the regional level, which is already above the regional rates.

Example Interventions:

- Cesarean sections: Covered at 75–80%.
- Normal deliveries: Covered at 80%.
- Childhood vaccines and growth monitoring: Free of charge.

Such steps pull Sulaymaniyah towards Sustainable Development Goal (SDG-3) targets.

3. Prevention Screening Programs in place.

Systematic preventive programs will be included in the insurance package of Year 5:

Diabetes (HbA1c), hypertension, lipid disorders: The disease is identified early in order to avoid expensive hospitalizations.

- Cancer screening (mammography, Pap smear, colonoscopy): Reduces late-stage treatment costs.
- Infectious disease screening (HIV, hepatitis, TB): Ensures timely intervention.

Prevention is relatively low in cost, whereas it yields exponentially high returns in the form of a reduction in future hospitalization needs.

Long-Term Benefits (Years 6–10)

1. Sustainable Universal Health Coverage (UHC).

By Year 10, Sulaymaniyah is projected to achieve $\geq 95\%$ population coverage, hence achieving sustained Universal Health Coverage (UHC). The insurance pool, comprising 1.5 million covered residents who each contribute an average annual premium of 300,000 IQD, generates:

$$1,500,000 \times 300,000 = 450 \text{ billion IQD annually}$$

This will ensure financial stability and the right to health services worldwide.

2. Improved Life Expectancy (+3 Years)

Coupled with extended preventive care, fewer costs, and the improvement of chronic disease care, the average life expectancy will increase by at least three years in a decade.

For example:

- Much improved management of diabetes decreases cardiovascular mortality.
- Cancer screening facilitates more interventions, which are more treatable.
- Investments in maternal and child health lead to a decrease in multigenerational deaths.

3. Decline in Medical Poverty & Disastrous spending.

At present, a major contributor to medical poverty in Sulaymaniyah is catastrophic health expenditure, in which over 10% of household income is allocated to healthcare. Through risk pooling and subsidizing costly interventions:

- Disastrous expenditure is minimized.
- Families do not lose their financial stability even when they have cancer, cardiac surgery, or even emergency admissions.
- Social cohesion is strengthened with health insurance becoming a safety net for everyone.

Why These Benefits Matter

- **Economic Impact:** Decrease in OOP allows family incomes to spur local economies.
- **Equity:** Categories of vulnerable people (elderly, unemployed, displaced) are subsidized so that they do not have to face exclusion.
- **Public Trust:** Visible changes of access, affordability, and health outcomes create legitimacy.
- **Sustainability:** The system is economically viable because its expenditure is at the same level as 7-9 % of GDP suggested by OECD.
- **Population Health:** Not only is pooled financing sustainable, but it is life-saving as evidenced by improved life expectancy and reduction in maternal/child deaths.

Conclusion

The anticipated positive impacts of the health insurance reform in Sulaymaniyah are short-term and long-term. The immediate impact on households will be direct relief in terms of lower costs of OOPs and essential care, which will be subsidized. In the medium run, child and maternal mortality rates will be reduced, preventive initiatives will thrive, and the OOP will hit the WHO 20 percentage mark. Long-term universal health coverage will be attained, life expectancy will increase, and poverty in medicine will be reduced.

Simply put, the reform will turn healthcare into a financial burden into an insured right, not only in terms of health security, but also of social justice and economic sustainability to the people of Sulaymaniyah.

6. Results (Ansbro et al., 2025)

Sulaymaniyah health insurance model has been assessed based on the hospital tariffs in the region, data on essential medicines, and monetary simulations. The results bring out the effectiveness of structured coverage, tiered co-pays, and preventive subsidies in providing health and financial sustainability. The results are introduced in six broad categories of services.

6.1 Medical Doctor Fees (Ansbro et al., 2025)

Preventive and early appointments are the least expensive way of utilizing health care resources:

- General practitioner (GP) visits cost 15,000–25,000 IQD, with 90% insurance coverage. A patient pays only 1,500–2,500 IQD out-of-pocket.
- Specialist consultations (25,000–40,000 IQD) are covered at 85%, encouraging accurate diagnosis at an early stage.
- Follow-up visits (10,000–15,000 IQD) are subsidized at 95%, ensuring continuity of care.

Impact: The insurance system will encourage patients to visit the primary and specialist consultations in time, resulting in a decrease in emergency admissions (30,000–50,000 IQD) and hospitalizations, which can be more than 1–2 million IQD per stay.

Example calculation:

If 100,000 insured residents each make 3 GP visits annually:

$$100,000 \times 3 \times 20,000 = 6 \text{ billion IQD gross cost}$$

The 90 % coverage has 5.4 billion IQD insurance, but citizens pay 0.6 billion together. This shows how small government expenditure results in big-scale prevention at an affordable price.

6.2 Diagnostic Imaging (Taniguchi et al., 2021, Ansbro et al., 2025)

Diagnosis requires imaging, which is likely to be abused. The model of tiered coverage would guarantee the rational use:

- X-rays & ultrasound (20,000–60,000 IQD): subsidized at 85–90%.
- CT scans (150,000–200,000 IQD): 70% covered, 30% co-pay.
- MRI (200,000–300,000 IQD): 65% covered, 35% co-pay.
- PET-CT (1.5–2 million IQD): 50% covered.

Impact:

- Patients receive the necessary diagnostic services free of charge.
- Co-pays will deter unneeded use of expensive modalities.
- Insurance money pools are not at risk of being emptied by over-dependence on high-tech technologies.

Example:

If each insured individual utilizes one imaging service per year, with 70% opting for lower-cost X-ray or ultrasound and 30% requiring CT or MRI, the average per capita imaging expense is approximately 100,000 IQD. Multiplying by 100,000 insured yields a yearly total of 10 billion IQD. This expense is feasible within the premium pool.

6.3 Laboratory Investigations (Ansbro et al., 2025)

Diagnostic tests of laboratories are very cost-effective in identifying chronic and infectious diseases at the earliest.

- Basic tests (CBC, ESR, glucose, lipid profile): 90–95% covered, costing 5,000–30,000 IQD each.
- Infectious screening (HIV, hepatitis): Covered at 85%, 25,000–40,000 IQD.
- Pathology & specialized tests (biopsies, tumour markers): Partially covered (65–75%), reflecting high cost.

Impact: The insurance system would facilitate the early diagnosis of diabetes, hypertension, lipid disorders, and cancers at a time when the coverage is 90-95 % of the essential labs, which would subsequently result in long-term high costs of hospitalization in case of untreatment.

Example:

Two lab panels per person per year (average cost 20,000 IQD each):

$100,000 \times 2 \times 20,000 = 4 \text{ billion IQD annually}$

Insurance pays ~3.6 billion IQD; households contribute 0.4 billion.

Conclusion: Even a small amount of money invested in lab diagnostics will help to save tens of billions of dollars every year, avoiding advanced complications.

6.4 Surgeries & Procedures (Ansbro et al., 2025)

One of the greatest financial expenses is surgery. Treatment is prioritized to benefit those life-saving surgeries, whereas the elective and expensive surgeries must pay the co-payment:

- Normal delivery: 2–3 million IQD, 80% coverage.
- Cesarean section: 3–4.5 million IQD, 75% coverage.
- Appendectomy: 2.5–3.5 million IQD, 80% coverage.
- Cardiac bypass surgery: 15–20 million IQD, 65% coverage.

Impact:

- Vital maternal and emergency surgeries are fully subsidized and this saves families a devastating sum.
- Co-pays (25-35%) are high-cost elective procedures that are used to ensure there is rational utilization and financial stability.

Example:

In case 5% of those being insured have surgery every year (5,000 patients), the average cost per operation of around 3 million IQD = 15 billion IQD per year. Insurance covers 75–80% (~11–12 billion), and households contribute 3–4 billion.

6.5 Medications (Ansbro et al., 2025)

Drugs are one of the most common domestic outlays. The insurance plan gives a priority to generics and basic medicine, and also incurs co-payments on expensive treatments:

- **Generics** (antibiotics, antihypertensives, statins, insulin): 90–95% coverage.
- **New diabetes agents** (e.g., Sitagliptin): 70% coverage, 30% co-pay.
- **Standard chemotherapy**: 80% coverage.
- **Biologics** (e.g., Trastuzumab): 50–60% coverage.
- **Immunotherapies** (e.g., Pembrolizumab): 50% coverage.

Impact:

- Generics achieve the ubiquitous accessibility, which improves chronic disease management.
- Oncology patients obtain access to life-saving medications without burdening the insurance pool.
- Biologics and immunotherapies are partially covered such that empathy and financial prudence are balanced.

6.6 Financial Simulation

A financial simulation was conducted to test feasibility:

- Premium Pool:
 $100,000 \times 300,000 = 30$ billion IQD annually
- **Utilization Assumptions (per person per year):**
 - 3 doctor visits (avg. 20,000 IQD each).
 - 2 laboratory panels (20,000 IQD each).
 - 1 imaging test (avg. 100,000 IQD).
 - 5% undergoing surgery (avg. 3 million IQD).
- **Estimated Total Costs:**
 - Doctor visits: 6 billion IQD.
 - Labs: 4 billion IQD.
 - Imaging: 10 billion IQD.
 - Surgeries: 15 billion IQD.
 - Medications: ~10 billion IQD.
 - Total ≈ 45 billion IQD.

With a 30 billion IQD pool, this initially suggests a deficit. However, introducing co-pays (10–35%), generic substitution, and preventive screening reduces effective system costs significantly.

Preventive savings:

- HbA1c helps to avoid diabetic complications, and it saves 12 to 2 million IQD per avoided hospitalization.
- Generic substitution saves the drug costs by 30–70%.
- There is limited unnecessary hospitalization due to gatekeeping (GP as the first entry point).

Adjusted outcome: The effective annual cost is reduced to approximately 30 billion IQD by using cost-control measures, which means that the system is economically feasible at the pilot scale.

Conclusion

The findings confirm that the model of health insurance in Sulaymaniyah is cost-effective and viable. Through preventive care to prioritize, subsidizing crucial care, and using tiers of coverage of high-expenditure interventions, the system safeguards households against disastrous spending on health and achieves financial sustainability.

- **Doctor bills:** Cheap access to prevention and continuity of care.
- **Imaging:** Reasonable use in the form of tiered subsidies.
- **Labs:** Preventive diagnosis of chronic and infectious illnesses.
- **Surgeries:** Cover against disastrous maternal and emergency expenses.
- **Medications:** Generics available everywhere, some subsidies on expensive treatment.
- **Simulation:** The premium pool is sufficient with cost controls, and it shows how viable it is.

Combined, these findings are a great rationale to scale up the pilot to full universal health coverage in Sulaymaniyah.

6.7. The model saves the effective cost at the pilot level to approximately 30 billion IQD through a combination of actions, including tiered co-payments, generic substitution, and preventive health programs, bringing the effective cost to 45 billion IQD.

Cost-Control Mechanism	Description / Basis	Estimated Savings (%)	Savings Value (IQD)	Adjusted Total Cost (IQD)
Co-payments	10–35% contribution from patients depending on service type (GP, imaging, surgery, oncology)	≈ 15% of total costs	6.8 billion IQD	38.2 billion IQD
Generic Drug Substitution	Replacing branded drugs with generics (30–70% cheaper)	≈ 20% on pharmaceutical costs	2.0 billion IQD	36.2 billion IQD
Preventive Interventions	HbA1c screening (25,000 IQD/test) vs hospitalization for diabetes (1.5 million IQD each)	≈ 15–20% reduction in hospital costs	4.0 billion IQD	≈ 30 billion IQD

7. Final Conclusions and Suggestions

Conclusions

The health insurance system proposed to Sulaymaniyah is a financially viable and socially responsible way of attaining universal healthcare. The system is intended to keep the expenditure at the current OECD rate of 7-9 % of GDP and integrates various funding mechanisms, such as payroll taxes, government subsidies, sin taxes, voluntary insurance and foreign aid, to be sustainable. The plan encourages financial sustainability in the long term despite the increasing needs in healthcare through proactive health services, generic drug substitution, and systematic co-payment arrangements. In addition, its focus on equity and risk pooling will change a broken, out-of-pocket model into an all-inclusive social protection system, aiming to achieve an Equity Index of 0.8 or more in five years to ensure equitable access by poor groups.

The implementation roadmap is a ten-year plan in a gradual, but ambitious, process. The first stages are aimed at governance, pilot projects and computer infrastructure and subsequently enrolment, more aggression towards the business sector and massive reductions in out-of-pocket costs. The ultimate goal of the system would be close universality, international accreditation, and quantifiable health outcomes, such as longer life expectancy and less medical poverty. Its design continues to focus on preventive care, which is supported by the fact that interventions early in life lead to considerable cost reduction and improvement of health. This insurance system of the future hopes to transform the medical healthcare not into a commodity, but a group right, which will strengthen social trust, social cohesion and longevity of the economy.

Suggestions

1. **Legislative Anchoring:** The enactment of the Health Insurance Act in the Kurdistan Regional Parliament is a guarantee of inclusion of everyone, fairness and the non-interference of the Health Insurance Authority (HIA) by the political transformation.
2. **Digitise Digital Health Infrastructure:** Pay attention to electronic health records (EHRs), smart cards and live claims tracking by the Year 2. These will reduce fraud, improve efficiency and transparency.
3. **Enhance Preventive and Primary Care:** Allocate at least 25-30 % of the insurance pool to preventive services and primary care, as it leads to the highest cost savings and long-term health benefits.
4. **Private Sector Integration with Regulation:** Have contract private hospitals and laboratories on clear tariffs and implement Joint Commission International (JCI) accreditation policies. This increases the capacity whilst ensuring quality and affordability.
5. **Integration of the Private Sector and Regulation:** Contracted population of hospitals and laboratories, and impose Joint Commission International (JCI) standards of accreditation. This increases capacity without compromising on quality and cost.
6. **Dynamic Financing Adjustments:** the contribution rates and subsidies are adjusted every 3-5 years according to the GDP growth, inflation, and how the services are used. Provide some adjustment mechanisms that are flexible to maintain expenditure within sustainable levels.
7. **Sound Monitoring and Evaluation:** Conduct annual public reports and five-year independent evaluations addressing coverage, prices, quality, and patient satisfaction.
8. This is an evidence-based feedback loop that helps to be accountable and improve continuously.

Closing Statement

Sulaymaniyah has a chance to be the first to establish a model of universal health coverage in the Kurdistan Region and Iraq. The proposed insurance system will alleviate poverty, enhance health outcomes, and establish trust towards healthcare among the people by integrating financial sustainability, equity and preventive care in its design. Health insurance in this case is not just a reform of a financial source, but an investment in social justice, economic stability, and healthier generations in the future.

8.0 Index

8.1. Medical Doctor Fees

The consultations and specialist care are top priority because of their preventive nature. At an early stage, consultations should be encouraged to manage the Department of late hospitalization.

Service	Cost (IQD)	Coverage	Co-pay	Justification
General Practitioner Visit	15,000 – 25,000	90%	10%	Prevents unnecessary hospital visits
Specialist Consultation	25,000 – 40,000	85%	15%	Accurate diagnosis reduces costs
Follow-up Visit	10,000 – 15,000	95%	5%	Continuity of care
Emergency Visit	30,000 – 50,000	80%	20%	Reduces complications

8.2 Diagnostic Imaging

The imaging is offered with tiered coverage, where simple types of imaging, such as the X-rays and ultrasound, are heavily subsidized, but the most advanced imaging, such as MRI and PET-CT, are subject to a co-pay to ensure sustainability and reasonable utilization.

Tool	Cost (IQD)	Coverage	Co-pay	Justification
X-Ray	20,000 – 30,000	90%	10%	Low-cost first-line
Ultrasound	40,000 – 60,000	85%	15%	Maternal, abdominal
CT-Scan	150,000 – 200,000	70%	30%	Oncology, trauma
MRI	200,000 – 300,000	65%	35%	Advanced diagnostics

8.3 Surgeries & Procedures

Surgical procedures are variable charged based on the cost and the requirement. More coverage is provided on life-saving surgeries such as appendectomy and cesarean sections, whereas elective and expensive surgeries are provided with cost-sharing to make them sustainable.

Procedure	Cost (IQD)	Coverage	Co-pay
Normal Delivery	2,000,000 – 3,000,000	80%	20%
Cesarean Section	3,000,000 – 4,500,000	75%	25%
Appendectomy	2,500,000 – 3,500,000	80%	20%
Cardiac Bypass	15,000,000 – 20,000,000	65%	35%

8.4 Medications

Medicines are reimbursed based on priority to essential generics, as per WHO and KRG essential medicines list. There is partial coverage of high-cost biologics, and immunotherapies.

Category	Examples	Cost (IQD)	Coverage	Co-pay
Antibiotics	Amoxicillin, Ceftriaxone	1,000 – 15,000	90–95%	5–10%
Cardiovascular	Amlodipine, Atorvastatin	2,000 – 12,000	90–95%	5–10%
Diabetes	Metformin, Insulin	1,000 – 15,000	95%	5%
Oncology	Imatinib, Trastuzumab	500,000 – 2,000,000	50–60%	40–50%

8.5 Comprehensive Laboratory Investigations Table

Diagnosis in the laboratory is very economical. There is 90-95 % coverage of basic tests like CBC, HbA1c, lipid profile, and microbiology cultures because they lessen the complications caused by chronic and infectious diseases.

Test / Investigation	Cost (IQD)	Coverage %	Co-pay %	Justification
Adrenocorticotrophic hormone (ACTH) EDTA Plasma	20,000	90%	10%	Specialized diagnostic
HbA1C	10,000	95%	5%	Essential test
Glucose (Urine)	4,000	95%	5%	Essential test
Albumin (Random Urine)	8,000	95%	5%	Essential test
Microalbumin Urine	12,000	90%	10%	Specialized diagnostic
Glucose For C.S.F	5,000	95%	5%	Essential test
Protein For C.S.F	8,000	95%	5%	Essential test
Cholesterol (Fluid)	4,000	95%	5%	Essential test
LDH Fluid	10,000	95%	5%	Essential test
Albumin Fluid	10,000	95%	5%	Essential test
Amylase Fluid	10,000	95%	5%	Essential test
Protein Fluid	5,000	95%	5%	Essential test
Glucose Fluid	5,000	95%	5%	Essential test
Fluid Analysis (Cell Counting)	35,000	80%	20%	Specialized diagnostic
CSF Analysis (Cell Counting)	25,000	90%	10%	Specialized diagnostic
Ferritin	8,000	95%	5%	Essential test

Vitamin B12	12,000	90%	10%	Specialized diagnostic
Vitamin D3	13,000	90%	10%	Specialized diagnostic
Folate (Folic Acid)	14,000	90%	10%	Specialized diagnostic
T3	6,000	95%	5%	Essential test
T4	6,000	95%	5%	Essential test
TSH	6,000	95%	5%	Essential test
Free T3 (FT3)	7,000	95%	5%	Essential test
Free T4 (FT4)	7,000	95%	5%	Essential test
ATPO (Anti-Thyroid Peroxidase Antibody)	15,000	90%	10%	Specialized diagnostic
Thyroglobulin	20,000	90%	10%	Specialized diagnostic
Anti-Thyroglobulin	20,000	90%	10%	Specialized diagnostic
PTH (Parathyroid Hormone)	18,000	90%	10%	Specialized diagnostic
TSH Receptor Ab (TRAb)	25,000	90%	10%	Specialized diagnostic
Total Iron	5,000	95%	5%	Essential test
Total Protein	5,000	95%	5%	Essential test
S.Albumin	5,000	95%	5%	Essential test
S.Calcium	5,000	95%	5%	Essential test
Magnesium (Mg)	8,000	95%	5%	Essential test
ALT (Alanine Aminotransferase)	5,000	95%	5%	Essential test

AST (Aspartate Aminotrasferase)	5,000	95%	5%	Essential test
ALP	5,000	95%	5%	Essential test
Total Bilirubin (TSB)	4,000	95%	5%	Essential test
Direct Bilirubin	5,000	95%	5%	Essential test
GGT (Gamma Glutamyl transferase)	12,000	90%	10%	Specialized diagnostic
Amylase	8,000	95%	5%	Essential test
Lipase	8,000	95%	5%	Essential test
LDH (Lactate Dehydrogenase)	10,000	95%	5%	Essential test
CPK (Creatine Phosphokinase)	10,000	95%	5%	Essential test
CK-MB (Creatine Kinase-MB)	12,000	90%	10%	Specialized diagnostic
Complement component 3 (C3)	15,000	90%	10%	Specialized diagnostic
Complement component 4 (C4)	15,000	90%	10%	Specialized diagnostic
Immunoglobulin A (Total IgA)	15,000	90%	10%	Specialized diagnostic
Immunoglobulin G (Total IgG)	15,000	90%	10%	Specialized diagnostic
Immunoglobulin E (Total IgE)	15,000	90%	10%	Specialized diagnostic
Immunoglobulin M (Total IgM)	15,000	90%	10%	Specialized diagnostic
S.Phosphorus (PO4)	6,000	95%	5%	Essential test
C-Reactive Protein (CRP) Titer	6,000	95%	5%	Essential test

Ca 125 (Cancer Antigen-125)	15,000	90%	10%	Specialized diagnostic
Ca 19-9 (Carbohydrate Antigen-19-9)	15,000	90%	10%	Specialized diagnostic
Ca 15-3 (Carbohydrate Antigen-15-3)	15,000	90%	10%	Specialized diagnostic
CEA (Carcinoembryonic Antigen)	15,000	90%	10%	Specialized diagnostic
Ca 27-29	60,000	80%	20%	Specialized diagnostic
Free PSA (Free Prostate specific antigen) FPSA	25,000	90%	10%	Specialized diagnostic
FPSA Ratio	35,000	80%	20%	Specialized diagnostic
Total Prostate Specific Antigen (TPSA)	15,000	90%	10%	Specialized diagnostic
Alpha Fetoprotein (AFP)	15,000	90%	10%	Specialized diagnostic
Troponin T	15,000	90%	10%	Specialized diagnostic
Troponin I STAT	25,000	90%	10%	Specialized diagnostic
Insulin	15,000	90%	10%	Specialized diagnostic
C-peptide	17,000	90%	10%	Specialized diagnostic
Dehydroepiandrosterone sulfate (DHEA-S)	20,000	90%	10%	Specialized diagnostic
LH(luteinizing hormone)	8,000	95%	5%	Essential test

FSH(Follicle stimulating hormone)	8,000	95%	5%	Essential test
Prolactin	8,000	95%	5%	Essential test
E2 (Estradiol)	8,000	95%	5%	Essential test
Anti-Mullerian Hormone (AMH)	35,000	80%	20%	Specialized diagnostic
SHBG (Sex Hormone Binding Globulin)	35,000	80%	20%	Specialized diagnostic
Free Testosterone	15,000	90%	10%	Specialized diagnostic
Testosterone (Total Testosterone)	8,000	95%	5%	Essential test
Progesterone	10,000	95%	5%	Essential test
17- OH Progesterone (Basal)	30,000	90%	10%	Specialized diagnostic
Cortisol (Morning: 6:00AM - 10:00 AM)	15,000	90%	10%	Specialized diagnostic
Cortisol (Evening: 4:00PM - 8:00PM)	18,000	90%	10%	Specialized diagnostic
Zinc	8,000	95%	5%	Essential test
Electrolyte Without Ionizing Calcium	12,000	90%	10%	Specialized diagnostic
Copper	15,000	90%	10%	Specialized diagnostic
HCG-Beta TITER	8,000	95%	5%	Essential test
GTT (Glucose Tolerance Test)	20,000	90%	10%	Specialized diagnostic
Unsaturated iron-binding capacity (UIBC)	8,000	95%	5%	Essential test

Procalcitonin (PCT)	35,000	80%	20%	Specialized diagnostic
Cholesterol	3,000	95%	5%	Essential test
Triglyceride	3,000	95%	5%	Essential test
HDL	5,000	95%	5%	Essential test
LDL	5,000	95%	5%	Essential test
VLDL	0	95%	5%	Essential test
Blood urea	3,000	95%	5%	Essential test
Creatinine	3,000	95%	5%	Essential test
Creatine kinase-MB (CK-MB)	12,000	90%	10%	Specialized diagnostic
S.CPK (CK)	10,000	95%	5%	Essential test
Albumin / Creatinine Ratio (ACR)	17,000	90%	10%	Specialized diagnostic
Protein/Creatinine Ratio (PCR)	17,000	90%	10%	Specialized diagnostic
Blood Urea Nitrogen (BUN)	0	95%	5%	Essential test
NT-ProBNP	35,000	80%	20%	Specialized diagnostic
Ceruloplasmin	25,000	90%	10%	Specialized diagnostic
Insulin-like growth factor 1 (IGF-1)	25,000	90%	10%	Specialized diagnostic
Calcitonin (Catn)	50,000	80%	20%	Specialized diagnostic
Transferrin	12,000	90%	10%	Specialized diagnostic
Interleukin-6 (IL6)	40,000	80%	20%	Specialized diagnostic

IgG4, Serum [1059]	90,000	70%	30%	Advanced/High-cost test
Uric Acid (Random Urine)	8,000	95%	5%	Essential test
Uric Acid	5,000	95%	5%	Essential test
HIV Ab Titer	6,000	95%	5%	Essential test
HCV Ab Titer	8,000	95%	5%	Essential test
HBs Ag Titer	6,000	95%	5%	Essential test
Viral (Rapid test)	9,000	95%	5%	Essential test
Seminal Fluid Analysis	15,000	90%	10%	Specialized diagnostic
Bence Jones Protein	15,000	90%	10%	Specialized diagnostic
Cystatin 24 urine	40,000	80%	20%	Specialized diagnostic
5-Hydroxyindoleacetic Acid (5HIAA) 24hr Urine	90,000	70%	30%	Advanced/High-cost test
Phosphorus (24Hr Urine)	8,000	95%	5%	Essential test
Calcium (24Hr Urine)	15,000	90%	10%	Specialized diagnostic
24 hour urine Protein-Creatinine	20,000	90%	10%	Specialized diagnostic
Vanillylmandelic Acid (VMA)	40,000	80%	20%	Specialized diagnostic
Albumin (24hrs Urine)	15,000	90%	10%	Specialized diagnostic
Uric Acid (24 hrs Urine)	8,000	95%	5%	Essential test

Urine Free Cortisol (24hr)	35,000	80%	20%	Specialized diagnostic
Metanephrine (24hr Urine)	45,000	80%	20%	Specialized diagnostic
Nor-Metanephrine (24hr Urine)	45,000	80%	20%	Specialized diagnostic
Adrenaline (Epinephrin) 24 hr Urine	50,000	80%	20%	Specialized diagnostic
Nor-Adrenaline (NorEpinephrin) 24 hr Urine	50,000	80%	20%	Specialized diagnostic
Stone Analysis (Calculus Analysis)	30,000	90%	10%	Specialized diagnostic
Ammonia (NH3L)	20,000	90%	10%	Specialized diagnostic
Hb-Electrophoresis	35,000	80%	20%	Specialized diagnostic
Blood film	15,000	90%	10%	Specialized diagnostic
Clotting Time	4,000	95%	5%	Essential test
Bleeding time	4,000	95%	5%	Essential test
Direct Coombs Test	15,000	90%	10%	Specialized diagnostic
InDirect Coombs Test	15,000	90%	10%	Specialized diagnostic
Retticulocyte Count	10,000	95%	5%	Essential test
Blood Group	3,000	95%	5%	Essential test
ESR	4,000	95%	5%	Essential test
CBC + 5 Differential	8,000	95%	5%	Essential test
CBC (3D)	7,000	95%	5%	Essential test

Cross-Matching Test	15,000	90%	10%	Specialized diagnostic
Anti-Thrombin III	15,000	90%	10%	Specialized diagnostic
Lupus Anticoagulant	20,000	90%	10%	Specialized diagnostic
Lupus anticoagulant by DRVVT	35,000	80%	20%	Specialized diagnostic
Prothrombin Time (PT)	8,000	95%	5%	Essential test
Protein C	30,000	90%	10%	Specialized diagnostic
Protein S	30,000	90%	10%	Specialized diagnostic
Fibrinogen	40,000	80%	20%	Specialized diagnostic
Partial Thromboplastin Time (PTT)	8,000	95%	5%	Essential test
D-Dimer	18,000	90%	10%	Specialized diagnostic
Metanephrine (Plasma)	40,000	80%	20%	Specialized diagnostic
Non-Metanephrine (Plasma)	45,000	80%	20%	Specialized diagnostic
Adrenaline (Epinephrine) Plasma	50,000	80%	20%	Specialized diagnostic
Nor-Adrenaline (NorEpinephrine) Plasma	50,000	80%	20%	Specialized diagnostic
Renin	35,000	80%	20%	Specialized diagnostic
Aldosterone	35,000	80%	20%	Specialized diagnostic

Anti-Phospholipid IgM	12,000	90%	10%	Specialized diagnostic
Anti-Phospholipid IgG	12,000	90%	10%	Specialized diagnostic
Anti-Tissue Transglutaminase IgA	12,000	90%	10%	Specialized diagnostic
Anti-Tissue Transglutaminase IgG	12,000	90%	10%	Specialized diagnostic
Anti-Gliadin IgA	12,000	90%	10%	Specialized diagnostic
Anti-Gliadin IgG	12,000	90%	10%	Specialized diagnostic
Anti-Endomysial Ab-IgG	25,000	90%	10%	Specialized diagnostic
Anti-Endomysial Ab-IgA	25,000	90%	10%	Specialized diagnostic
Anti-Nuclear Antibody (Ana)	15,000	90%	10%	Specialized diagnostic
ANA (Indirect immunofluorescence)	35,000	80%	20%	Specialized diagnostic
Ana Profile	95,000	70%	30%	Advanced/High-cost test
Rose Bengal Test	5,000	95%	5%	Essential test
Brucella IgM	15,000	90%	10%	Specialized diagnostic
Brucella IgG	15,000	90%	10%	Specialized diagnostic
Helicobacter Pylori IgG	15,000	90%	10%	Specialized diagnostic
Helicobacter Pylori IgA	15,000	90%	10%	Specialized diagnostic

Anti-SSA Antibody (Anti-Ro)	15,000	90%	10%	Specialized diagnostic
Anti-SS-B Anti Body (Anti-La)	15,000	90%	10%	Specialized diagnostic
Growth Hormone (Basal)	20,000	90%	10%	Specialized diagnostic
Growth Hormone Suppression Test	55,000	80%	20%	Specialized diagnostic
Growth Hormone Stimulation By Clonidine	54,000	80%	20%	Specialized diagnostic
Growth Hormone Stimulation Test (Exercise)	54,000	80%	20%	Specialized diagnostic
Low-Dose Dexamethasone Suppression Test	70,000	80%	20%	Specialized diagnostic
High-Dose Dexamethasone Suppression Test	70,000	80%	20%	Specialized diagnostic
Short Synacthen Test	70,000	80%	20%	Specialized diagnostic
Short Synacthen Test (ACTH)	105,000	70%	30%	Advanced/High-cost test
Short Synacthen Test (17.OH Progesterone)	105,000	70%	30%	Advanced/High-cost test
Short Synacthen Test (2ACTH) 1 hour	125,000	70%	30%	Advanced/High-cost test
Anti-Beta2 Glycoprotein IgM	15,000	90%	10%	Specialized diagnostic
Anti-Beta2 Glycoprotein IgG	15,000	90%	10%	Specialized diagnostic

HSV I/II IgM	15,000	90%	10%	Specialized diagnostic
HSV I/II IgG	15,000	90%	10%	Specialized diagnostic
Anti-DsDNA IgG	15,000	90%	10%	Specialized diagnostic
HAV IgM Rapid Test	10,000	95%	5%	Essential test
HAV IgM Titer	25,000	90%	10%	Specialized diagnostic
HAV Total Titer	25,000	90%	10%	Specialized diagnostic
VDRL in CSF	10,000	95%	5%	Essential test
Syphilis Test	10,000	95%	5%	Essential test
Rheumatoid Factor (RF) Latex	10,000	95%	5%	Essential test
Rheumatoid Factor (RF) IgM	16,000	90%	10%	Specialized diagnostic
Rheumatoid Factor (RF) IgG	16,000	90%	10%	Specialized diagnostic
Typhoid or Salmonella (typhoid)IgG & IgM	8,000	95%	5%	Essential test
Cytomegalovirus (CMV) IgM	15,000	90%	10%	Specialized diagnostic
Cytomegalovirus (CMV) IgG	15,000	90%	10%	Specialized diagnostic
Anti-Topoisomerase I (Anti-SCL 70)	30,000	90%	10%	Specialized diagnostic
Anti-Topoisomerase I (Anti-SCL 71)	40,000	80%	20%	Specialized diagnostic
Anti-MPO- (pANCA)	18,000	90%	10%	Specialized diagnostic

Anti-PR3- (cANCA)	18,000	90%	10%	Specialized diagnostic
Anti-Smith (Anti-Sm)	35,000	80%	20%	Specialized diagnostic
Anti-CCP	20,000	90%	10%	Specialized diagnostic
Toxoplasma IgG	15,000	90%	10%	Specialized diagnostic
Toxoplasma IgM	15,000	90%	10%	Specialized diagnostic
Rubella IgM	15,000	90%	10%	Specialized diagnostic
Rubella IgG	15,000	90%	10%	Specialized diagnostic
Cardiolipin IgG	15,000	90%	10%	Specialized diagnostic
Cardiolipin IgM	15,000	90%	10%	Specialized diagnostic
Anti-Cardiolipin IgA	20,000	90%	10%	Specialized diagnostic
Anti-Streptolysin O (ASO)	5,000	95%	5%	Essential test
Epstein-Barr Virus (EBV) IgM	18,000	90%	10%	Specialized diagnostic
Epstein-Barr Virus (EBV) IgG	18,000	90%	10%	Specialized diagnostic
Anti-Mitochondrial Ab (AMA)	25,000	90%	10%	Specialized diagnostic
ASMA(Anti Smooth Muscle Ab)	40,000	80%	20%	Specialized diagnostic
Anti-LKM Ab	25,000	90%	10%	Specialized diagnostic

Fasciola hepatica-IgG	50,000	80%	20%	Specialized diagnostic
Anti-Gad	40,000	80%	20%	Specialized diagnostic
Erythropoietin (EPO)	55,000	80%	20%	Specialized diagnostic
Chromogranin A	60,000	80%	20%	Specialized diagnostic
Urea Breath Test	35,000	80%	20%	Specialized diagnostic
Echinococcus IgG	40,000	80%	20%	Specialized diagnostic
Anti-Parietal Cell	45,000	80%	20%	Specialized diagnostic
Anti-Intrinsic Factor	45,000	80%	20%	Specialized diagnostic
TB-PCR	90,000	70%	30%	Advanced/High-cost test
TB "Gene-Expert" (A)	200,000	60%	40%	Advanced/High-cost test
HLA-B27 Mutation	135,000	70%	30%	Advanced/High-cost test
HCV (Hepatitis-C Virus)-PCR [397]	65,000	80%	20%	Specialized diagnostic
HBV (Hepatitis-B Virus)-PCR	65,000	80%	20%	Specialized diagnostic
JAK-2 Mutation	100,000	70%	30%	Advanced/High-cost test
JAK-2 "Exon 12" Mutation (B)	125,000	70%	30%	Advanced/High-cost test

EBV (Epstein-Barr Virus) by Quantitative PCR	150,000	70%	30%	Advanced/High-cost test
BK-Virus "Quanti"-PCR	200,000	60%	40%	Advanced/High-cost test
MPN-Myeloproliferation Neoplasm Panel	300,000	60%	40%	Advanced/High-cost test
BCR-ABL "P210"/Quali (B)	100,000	70%	30%	Advanced/High-cost test
BCR-ABL "P190" /Quanti (B)	200,000	60%	40%	Advanced/High-cost test
BCR-ABL "P210"-FISH (A)	200,000	60%	40%	Advanced/High-cost test
BCR-ABL "P190"/Quali(B)	125,000	70%	30%	Advanced/High-cost test
BCR-ABL "P210" /Quanti (B)	200,000	60%	40%	Advanced/High-cost test
General Urine Examination (GUE)	4,000	95%	5%	Essential test
Stool for Calprotectin TITER	20,000	90%	10%	Specialized diagnostic
General Stool Examination (GSE)	4,000	95%	5%	Essential test
Stool Ph	3,000	95%	5%	Essential test
Fecal Immunochemical Test (FIT)	18,000	90%	10%	Specialized diagnostic
Enteric (Adenovirus & Rotavirus) Ag	20,000	90%	10%	Specialized diagnostic
Stool for H-pylori Ag	8,000	95%	5%	Essential test
Clostridium Difficile Toxin A+B	20,000	90%	10%	Specialized diagnostic

AChR Ab (Acetylcholine receptor antibody)	90,000	70%	30%	Advanced/High-cost test
Food allergy panel	40,000	80%	20%	Specialized diagnostic
Food Print (IgG)	300,000	60%	40%	Advanced/High-cost test
Allergy screen (comprehensive panel)	350,000	60%	40%	Advanced/High-cost test
Respiratory Allergy Panel	45,000	80%	20%	Specialized diagnostic
Respiratory panel-20Agent	260,000	60%	40%	Advanced/High-cost test
Respiratory Infection panel-3Agent	75,000	70%	30%	Advanced/High-cost test
Blood culture	40,000	80%	20%	Specialized diagnostic
Urine Culture	40,000	80%	20%	Specialized diagnostic
Tissue Culture	40,000	80%	20%	Specialized diagnostic
Throat Swab Culture Full Automated (BD)	40,000	80%	20%	Specialized diagnostic
Wound Swab Culture Full Automated (BD)	40,000	80%	20%	Specialized diagnostic
Fluid Culture Full Automated (BD)	40,000	80%	20%	Specialized diagnostic
CSF Culture Full Automated (BD)	40,000	80%	20%	Specialized diagnostic
HVS Culture Full Automated (BD)	40,000	80%	20%	Specialized diagnostic
Gram stain	12,000	90%	10%	Specialized diagnostic
AFB (Sputum And All Fluid)	12,000	90%	10%	Specialized diagnostic
Culture For Yeast	40,000	80%	20%	Specialized diagnostic
PTHrP	200,000	60%	40%	Advanced/High-cost test

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