



Health Finance and Governance Activity

# Essential Health Package for the Civil Health Insurance Program: A Discussion Paper

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## Acronyms

CIP	Civil Insurance Program
CPT	Current Procedural Terminology
DCP	Disease Control Priorities
EHP	Essential Health Package
HFG	USAID Health Finance and Governance
HIA	Health Insurance Administration
MOH	Ministry of Health
MOPIC	Ministry of Planning and International Cooperation
NCD	Non communicable Diseases
OECD	The Organization for Economic Co-operation and Development
PHI	Private Health Insurance
RMS	Royal Medical Services
TPA	Third Party Agreement
UHC	Universal Health Coverage
WHO	World Health Organization

## Executive Summary<sup>1</sup>

Defining an Essential Health Package (EHP) includes identifying requirements for coverage with the goal of achieving universal health coverage (UHC). An EHP is a standard set of benefits that is the same for all members, which is unlike the variable benefits (CIP) today. Adherence to an EHP offering would be managed through legislation.

The USAID Health Finance and Governance (HFG) conducted a workshop in December 2018 with key stakeholders from the public and private health sector in Jordan including the MOH, the Health Insurance Administration (HIA), the Royal Medical Services (RMS), Ministry of Planning and International Cooperation (MOPIC), universities and private insurers to discuss the need to develop an EHP as well as to define the opportunities and challenges that might arise when developing and managing the package. This report reflects the consensus decisions reached in that session as well as a detailed roadmap for the introduction of an EHP in Jordan.

To provide context to an EHP in Jordan, it is important to consider the current public-sector health product that covers a broad base of citizens- the Civil Insurance Program (CIP). The CIP is largely financed through government subsidization, although beneficiaries are charged a fee to access the system. The current program is referred to as an “insurance” program, but it does not embody insurance attributes. Additionally, it is undetermined whether or not an insurance product is the correct vehicle to provide universal health coverage in Jordan.

To clarify, health insurance is limited in term, requires payment by the policyholder to the insurance company (premiums), and details various conditions under which the insurance company is responsible for the costs of medical care.<sup>i</sup> While the CIP appears to embody insurance components, an insurance product is measured in part by how well the premiums collected cover the costs of the medical expenses. In fact, the level of premium is intended to reflect the likelihood that members of the insured group will incur medical costs equal to the projected loss ratio or less.<sup>ii</sup> There is no way to determine whether or not the fees collected from members cover the actual costs of medical treatment as there are few (if any) public sector claims submitted for reimbursement. As a result, the CIP is a legal mechanism to provide for health care services and is a form of health care financing. This is different from health insurance where the insurer “manages” the financial funds between funders and providers of health care services ensuring sustainability. Therefore, the CIP is not considered insurance, but a form of healthcare financing, whose sustainability (ensuring adequate financing for expected medical costs) is unknown.

Health financing can be provided through a variety of mechanisms. Social health insurance is one mechanism for raising and pooling funds to finance health services, along with tax-financing, private health insurance, community insurance, and others.<sup>iii</sup>

**Purpose:** the purpose of this paper is twofold, first to consider the approach to take in defining an EHP in Jordan, and second to provide a roadmap towards introduction and management of an EHP. Part I of this paper:

- Provides a background on universal health financing concepts including social health insurance, single payer, two-tier, and the use of an insurance mandate;
- Outlines supplemental financial protection alternatives;
- Identifies challenges in measuring the impact of an EHP in Jordan including provider payment mechanisms;

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<sup>1</sup> This white paper is based on the EHP workshop held by USAID HFG on December 3, 2018.

- Details core benefit groupings to be included in an EHP.

Part 2 provides concrete steps supporting the development of a sustainable product including risk management tools and product development processes. Because it is impossible to know what future health threats or technologies may emerge, EHPs evolve. Best practices to modify an EHP will ensure sufficient expertise to manage product, network, claims and budget modifications in the future.

The following are ten considerations in introducing an EHP for CIP in Jordan:

- **The current healthcare market is highly fragmented** resulting in inefficiencies like duplicate testing and waiting lines. Providing financing for an inefficient delivery system is counter-intuitive. Therefore, steps should be taken to improve the mechanisms for managing a member across the care continuum.
- **The rates of non-communicable diseases in Jordan are on the rise.** This is due in part to lifestyle risks including smoking, obesity, and low activity rates. The current CIP product is largely curative and does not clearly address lifestyle risks and low health literacy levels. An EHP with a preventive focus will include primary care require annual medical doctor visits, and targeted member communication strategies along with provider and member incentives to participate in a healthy lifestyle, among other things.
- **An EHP should not discriminate** based on gender, social differences or race. A previous EHP draft product excluded maternity care which discriminated against women. The current CIP product discriminates based on salary grades, with higher paid civil servants provided access to private providers and lower salaried civil servants suffering from long waiting lines regarding access to important diagnostics (e.g., MRIs) and specialty care (e.g., neurology).
- **Members may be more susceptible to healthcare challenges when they are living in stressful conditions.** An EHP package can cover acceptable “moral support” outreach programs to counter the stigma of mental health while providing acceptable programs to reduce member stress.
- In Jordan, a **primary care doctor** visits with a member for an average of 3 minutes versus 21 in the USA.<sup>iv</sup> In markets with low access to General or Family Practitioners, introducing a primary care gatekeeper model will be a challenge, but is considered necessary.
- **Medical necessity must be defined,** one of the starting points of defining the EHP is to agree on a clear definition of medical necessity.
- **Create a transparent evaluation process** to measure the effectiveness of the EHP in achieving universal health coverage as well as improving clinical outcomes.
- **Develop a provider payment strategy (public and private).** Building a CIP fee schedule (for use in both public and private sectors) is maximized when the diagnosis and coding classification systems are standard: a coding system protects enrollees because it allows the payer to evaluate the treatment patterns and costs across different providers. It will be difficult to measure or compare claims trends if there are different coding systems in use. If a provider wants to care for EHP members, they will be obliged to use and report on the same coding systems. The RMS uses an evidence based relative value procedure coding classification system that can be considered for use across the public sector facilities. Use of standardized coding supports sustainable financing and is recommended whether or not an insurance-based solution is selected.
- **Jordan must decide on a regulator for the public sector and especially for CIP.** The regulator would be mandated to ensure that the EHP is standard, clear, priced, implemented, and revised when needed. Any modifications to the EHP product or claims exceptions (an excluded treatment that the Royal Court overturns for payment) must follow transparent

processes including budgetary impact to ensure a balanced budget. In other words, if the government insists that a treatment be paid outside of the EHP, then that funding is typically re-allocated from another part of the budget through a formal “exceptions” process. Exceptions inform future EHP product modifications.

- **An inclusive process is needed to reach a sustainable EHP.** The initial consultative discussion underlined the need to proceed with an inclusive and transparent process for defining an EHP. Inclusion of the private sector is pivotal. *This paper recommends an EHP committee to be established and an inclusive process be drafted and implemented.*

## Part I Defining an Essential Health Package

### EHP and UHC

The World Health Organization (WHO) proposes that the starting point for the development of an improved health care system in any country begins with a deep understanding of the existing organization and institutional arrangements within the current healthcare system.<sup>v</sup> It recommends an adaptable framework where universal health coverage is the desired outcome of the health system performance where all persons who need health services receive them without undue financial hardship.

Achieving universal health coverage (persons receive health services affordably), ideally includes the following benefits (through an EHP): health promotion and preventive services (primary care), treatment, rehabilitation and palliation.<sup>vi</sup> Although the benefits should be universal thereby covering everyone, ensuring access to healthcare is an essential first step.

Access to healthcare involves three components: *physical accessibility*, *financial affordability*, and *acceptability* (individual willingness to seek services).<sup>vii</sup> Accessibility ensures that needed services are available, of good quality and proximate to the beneficiaries. Financial affordability is improved by reducing direct out of pocket payments through government revenues or insurance contributions and pooling risks (sharing the costs across the entire covered population and identifying entitled populations). Acceptability, or individual willingness and awareness of services may be a challenge in Jordan due in part to a weak primary care sector. For example, the growing burden of non-communicable diseases (NCDs) is prevalent in Jordan leading to increased medical costs. A recommended strategy to reduce the burden of disease is to promote healthy lifestyles through primary care. Evidence indicates that the public in Jordan are under-informed in regard to cancer prevention and risks.<sup>viii</sup> Additionally, the majority of Jordanians prefer to obtain cancer knowledge through healthcare providers rather than other information-seeking channels (e.g., internet).<sup>ix</sup> If the public is to become better informed and willing to seek services (a key component of access to healthcare), the role and function of primary healthcare providers will have to change.

Universal health coverage involves the capacity to access needed health services without fear of financial hardship. This cannot be achieved until both health services and financial risk protection systems are accessible, affordable and acceptable.<sup>x</sup>

### Financing

There are a variety of financing forms that may be considered to support an EHP. Social health insurance is one mechanism for raising and pooling funds to finance health services, along with tax-financing, private health insurance, community insurance, and others.<sup>xi</sup> In mature social health insurance systems, working people and their employers, as well as the self-employed, pay contributions that cover a package of services available. In most cases, they are obliged legally to make these contributions. Many governments subsidize these systems to ensure or improve financial sustainability.<sup>xii</sup>

As social health insurance systems develop, they tend to evolve. For example, governments extend coverage to people who cannot pay, such as the poor and unemployed. The WHO reports that no social health insurance system is financed entirely by payroll deductions anymore.<sup>xiii</sup>

Currently there is significant variation in social health insurance programs that even systems that rely on voluntary enrollment are sometimes referred to as social health insurance programs. The underlying idea is that all people are, or will be over time, offered the right to enrollment in at least one type of mechanism allowing financial risks to be shared. This could involve a variety of insurance funding for some services and government funding for others.<sup>xiv</sup>

A social health insurance program<sup>xv</sup>:

1. Is a way to mobilize additional domestic resources for health;
2. Allows for organizational change that improves health system quality and efficiency;
3. Extends financial risk protection to more people or provide greater levels of protection to those already covered.

## Basis for Entitlement

The poor often bear the highest burden of disease and experience high levels of catastrophic health expenditures.<sup>xvi</sup> Social health insurance is considered a critical mechanism for achieving universal healthcare by providing financial protection.

Countries use different methods to expand coverage for health services to vulnerable groups. Rwanda's Ubudehe program, for example, includes a mechanism to identify those most in need of entitlement typically including orphans, widows and the elderly.<sup>xvii</sup> This stratification program is used for all social programs not just access to health insurance. However, not all entitlement programs are equal. In fact, the schemes in Ghana and Ethiopia cover less than 2% of the poor even though there are exemption (entitlement) initiatives.<sup>xviii</sup>

Challenges in identifying vulnerable groups include:<sup>xix</sup>

- Poor and vulnerable groups are left out of schemes because of difficulties in the identification process, even when there are legal requirements to do so.
- Poverty is a dynamic process and therefore categorizing poor and vulnerable people into rigid categories may lead some into financial impoverishment as a result of health shocks.

Social health insurance programs are expected to protect people from catastrophic healthcare costs in a variety of ways including government financial support as well as pooling funds to allow for cross-subsidization between the rich and poor and the healthy and sick.<sup>xx</sup>

## Methodologies

An important pooling tool to spread the risk is an **insurance mandate**. A mandate requires that all residents of the country have health insurance. This ensures a large "pool" of members to keep premiums affordable. If only the sick purchase health insurance, the premiums would be high (adverse selection).

There are generally two core forms of healthcare public sector financing methodologies: **single payer** and **two-tier**.

- **Single payer:** the government provides insurance for all residents (or citizens) and pays all healthcare costs except for copayments or coinsurance. Providers may be public, private or both. (Examples are Canada, Turkey and Australia)
- **Two tier:** the government provides (or mandates) catastrophic or minimum insurance coverage for all residents (or citizens), while allowing the purchase of additional voluntary insurance or fee-for-service care. In Singapore, all residents are covered by a catastrophic policy and a Health Savings Account to pay for routine care. In Ireland, the government provides a core policy which the majority of the population supplements with private insurance. (Examples are France and Japan)

Private health insurance (PHI) can be used to supplement or complement social health insurance. The Organisation for Economic Co-operation and Development (OECD) (2018) identified forms of private health insurance to supplement an EHP including:



- **Duplicate PHI:** private health insurance that offers coverage for health services in the government health insurance, while also offering access to different providers (e.g., private hospitals) (Examples are Greece, Germany, Ireland, Mexico, UK)
- **Complementary PHI:** private health insurance that complements government coverage by paying for the residual costs (e.g., cost-sharing copayments) (Examples are Turkey, US, Japan, Germany)
- **Supplementary PHI:** private health insurance that provides coverage for services not covered in the government scheme (Examples are Turkey, Japan, Germany, Switzerland)

In addition, some categories of benefits currently covered under the CIP product may be excluded in an EHP including over-the-counter medicines and vitamins.

Access to financial resources depends on a variety of factors including legal restraints. Some categories of financial resources to support an EHP include:

- “Sin” taxes (taxes imposed on alcohol, sugary drinks or cigarettes)
- Improved claims control (managing medical costs through data mining and provider/member outreach)
- Premium adequacy (charging correct premiums for each cohort)
- Investing premiums received
- Increased patient co-sharing
- Reinsurance

## Determining Benefits

Defining an EHP includes identifying requirements for coverage with the goal of achieving universal health care. Adherence to an EHP offering is usually managed through legislation. Considering the Jordanian market, currently, civil servants are entitled to a CIP set of benefits. The CIP benefits are defined through a series of bylaws. As a result, some groups of civil servants are eligible to receive expanded benefits including access to private hospitals (presumably to avoid waiting times and decrease the pressure on MOH crowded facilities). Although primary care is available, among Jordanians, primary prevention services are under provided and data suggest ample room to improve provider skills and practices.<sup>xxi</sup>

During the workshop held in December 2018, stakeholders discussed the history of the non-standard CIP product including “exceptions” that emerged as product gaps appeared. As a result, administration of the CIP is fragmented resulting in demand-based recommendations to a product change based on opinion rather than through a formal product exceptions process.

A product exceptions process typically includes an evaluation of the cost of the benefit change, source of funding, operational implications of the change, and sign off from the affected departments including the claims department. Finally, demand-based exceptions that change the product must be communicated so that all members are aware of the product change. When this process is absent, there is a lack of transparency and accountability.

In addition to the non-standard product exceptions process, the *Royal Court* is available for persons whose claims were denied or who lack coverage by any insurer (the uninsured). If data on the diagnoses and claims costs paid by the Royal Court are available, an evidence-based analysis of trends would yield important information regarding benefit design. Typically, claims exceptions that are overturned are studied on a regular basis to determine whether or not an overall product change is required. For example, if 20% of the Royal Court paid claims were for elderly hip replacement surgery, then a review

of the current product and network would be indicated. The goal is to reduce the number of claims exceptions through improved product and network changes.

In addition to unorthodox exceptions management, most products carry definitions to ensure a common understanding of the benefits available. For example, product language usually states that covered services are “medically necessary.” This means that the services or items are reasonable and required for the diagnosis and treatment of a condition and those standards of good medical practice and set criteria (evidence based guidelines) are available to ensure appropriate levels of care. In addition, “emergency” services are well defined to ensure that members do not use the emergency room for primary care services. Neither of these definitions is in the CIP.

The CIP coverage is very difficult for a layperson to understand. Typically, insurance products include summary benefit outlines so that enrollees can understand the benefits, copayments and coinsurance levels, and who to contact with questions or complaints. Absence of this summary level information reduces transparency and negatively impacts member trust in the system.

Finally, the cost of the CIP is unknown. Anecdotally there is evidence that there are higher claims costs compared to money paid for coverage. Therefore, the current CIP product should not be used as a model for an EHP.

### **Categories of benefits and provider access**

A major factor in determining whether or not social health insurance is feasible, financially viable, and supported by all stakeholders depends on the coverage (services available and total costs covered).<sup>xxii</sup> Many countries have developed “essential packages.” Costing the package helps determine the requirements for financial equilibrium and informs the discussion about what can and cannot be covered and for what reason(s).<sup>xxiii</sup> Because financing is limited, difficult choices will have to be made based on country priorities. This means striking a balance between what is cost-effective (provides the biggest health benefit to the population at the least cost) and what is desired. Financing decisions will impact: population and subsidization (who will be covered, level of subsidization and financing sources), benefits (what medical care is available), and network (which providers will be included, payment modality, quality metrics), to name a few.

Given the complexity of the CIP product, this section will focus on identified health benefits to be included in an EHP. The benefits should include the following categories of services:

- Primary care (preventive and curative)
- Outpatient care (curative)
- Hospitalizations, emergency room services
- Maternity and newborn care
- Mental health (moral support) and substance abuse disorders including behavioral health (recognizing that there are stigmas in Jordan including preconceived stereotypes, a sense of personal responsibility or blame for the condition, and perceptions regarding inability to recover from the condition)<sup>xxiv</sup>
- Prescription drugs
- Rehabilitative services and devices
- Laboratory services
- Preventive and wellness services, and chronic disease management (50% of mortality rates result from cardiovascular disease and cancer)
- Pediatric services including vision and dental

It is important to note that removing barriers to receiving care must be woven into the EHP if it is designed to be effective. In addition to the stigma associated with mental health noted above, health literacy levels also predict medical costs. In other words, just providing EHP is not the same as ensuring it will be accessed appropriately.

### **Ideas on pricing an EHP**

Many studies have been undertaken in Jordan in an effort to price the costs of an EHP using the current CIP coverage. These studies suffer from fragmentation and an absence of reliable claims data.

Overall, actuaries can use total medical costs incurred or paid as a way to estimate the costs of care today, or they can study other country medical expenditures and estimate expenses. Unfortunately, there is limited public sector medical expenditure data available, therefore it is difficult to estimate the actual costs of medical care in the public sector.

Additionally, while total medical costs would help in calculating the costs of medical care in the public sector, it's also important to know how many services were provided (utilization trends). This data helps identify areas where benefit or provider network changes are needed. For example, how often do beneficiaries in Irbid access emergency services instead of primary care, and what is the average length of stay in a public hospital? It is difficult to manage how beneficiaries use the providers (potentially overusing services) when there is limited data.

A related challenge in Jordan is the undersupply of medical providers including specialists. Opportunities to manage heavy patient demand include:

- Given the low availability of claims data to retrospectively analyze challenging health risks and health risk groupings, introduce a modified underwriting process to proactively identify high risk groups.
- “Dial a doctor” phone line for direct access to a clinician to help triage care.
- Requiring a “gatekeeper” approach to better manage patient care across the continuum. This requires sufficient family practitioners in all geographic areas with a defined provider retention mechanism as well as incentives for patient outcomes.
- Increase member awareness of prevention through an annual medical visit (including a blood panel) and supporting help through complex case management for “frequent flyers” and tools to address lifestyle risks like quitting smoking and mindfulness to reduce stress. Goal is to reduce the number of general practitioner visits and help individuals proactively manage poor lifestyle risks.
- Consider introducing “medical necessity” and “emergency” definitions to reduce overuse of healthcare system. For example, a person entering the “emergency room” for routine care would find the coverage denied (either through a pre-authorization process or through the provider contract requiring the facility to only admit emergency cases.) This would support the use of the public primary care system. However, the current time to wait for a primary doctor can take hours, where the emergency admission would perhaps move more quickly.

### **Impact of provider payment mechanisms on quality, efficiency and effectiveness of an EHP**

Provider reimbursement plays a critical role in managing medical costs. Because provider payment mechanisms create incentives or signals that influence the behavior of healthcare providers, attention must be given to ensure that the provider payment strategy supports quality outcomes.<sup>xxv</sup>

Provider payment mechanisms fall into these general categories:<sup>xxvi</sup>

1. Global Budget: A prospective payment system where health care providers are given an amount to spend with flexibility on how and what to spend on, to deliver an agreed-upon set of services.
2. Line-item budget: A prospective payment system where providers receive a given amount of money to spend on specific itemized services. The budget is not flexible and expenditure must follow line items, unless authorized.
3. Fee for Service (FFS): A retrospective activity-based reimbursement method where health care providers are reimbursed for each individual service provided.
4. Capitation (per capita): A payment method where providers receive a fixed amount of money prior to service delivery, to provide agreed services for each registered individual over a fixed period.
5. Per Diem: Health care providers are paid a fixed amount for given services per day
6. Case based (e.g., diagnosis-related groups): Providers are paid a fixed amount per case such as for each diagnosis, admission or discharge.
7. Pay for Performance: Paying health care providers on the basis of performance thresholds.

When assessing a payment mechanism, consider the impact on quality outcomes. For example, one study showed that the quantity of health care services (hospitalizations, number of services) reduced under capitation (negatively impacting quality). On the other hand, quantity of healthcare services generally increased under fee for service with no impact on quality outcomes.<sup>xxvii</sup> It's also important to consider how a payment form impacts overall health care utilization. For example, in another study, doctors reimbursed under global capitation accessed specialists (increased referrals) at a higher rate than those reimbursed under a fee for service basis.<sup>xxviii</sup> This occurred because a capitated provider has an incentive to refer patient care to specialists rather than treat.

Determining which payment approach to take involves assessing the following aspects: payment rate, accountability mechanism, payment schedule, performance indicators, bundling of services, and timeliness of payment.

1. Payment rate: refers to the actual amount paid for the services provided. While it is critical to ensure that the payments adequately cover the cost of services, this is difficult to assess in Jordan due to the variety of procedure classification systems – none of which are based on evidential levels of effort criteria. The Current Procedural Terminology (CPT) coding classification system is level of effort based. This means that each procedure is estimated to require a level of effort that does not change frequently. The unit cost of each level of effort, however, will change based on hospital specialization and size, as well as quality outcomes.
2. Accountability mechanism: refers to reporting requirement associated with the payment including claims details. A study in Tanzania found that health care providers regarded supervision and monitoring as important in a pay for performance environment.<sup>xxix</sup>
3. Payment schedule: or frequency of payment. Health care providers prefer shorter intervals between payments. A relatively shorter interval would increase funds that would aid in budgeting and purchasing. However, in Jordan, public providers are generally not autonomous and when funds are required, request government funding. Private providers however, complained (anecdotally) of late payments.
4. Payment based on performance indicators (P4P): are intended to motivate the provider to increase quality while containing costs. Studies show that there are variations as to whether performance should be based on quantity, quality or other process measurements.<sup>xxx</sup> One study found that inasmuch as the payment rate based on performance was important, physicians believed that the performance indicators needed to focus on quality and organizational

performance rather than individual performance due to individual outcomes being difficult to adequately assess.<sup>xxxix</sup>

5. Bundling services refers to aggregating services and paying as a group. Health care providers generally oppose bundled services due to the financial risk<sup>xxxix</sup> however, there is a big difference between the CPT (procedure) code bundling and that of DRGs (cases or episodes of care). CPT codes take typical items that occur during that procedure (often excluding anesthesia and hospital overnight charges), whereas a DRG bundles the costs of an entire “event” which is often difficult for a provider to manage. One way to effectively manage a DRG is through the development and use of clinical pathways. It’s important to bundle services in a way that is locally accepted. For example, a study in Ghana found that providers accepted global capitation but requested that maternity services be excluded to reduce the risk of under-serving maternity patients.<sup>xxxix</sup> Another study in Ghana found that bundled payments were a disincentive for health care providers to perform extensive diagnostic investigations in “Ghana’s Diagnostic Related Group” as extensive diagnostic investigations are often expensive and the bundled payments were considered too low to adequately cover the costs.<sup>xxxiv</sup>
6. Timeliness of payment is important in budgeting. However, in Jordan, most public providers are not autonomous and therefore do not budget. Private providers, on the other hand, require timely payments. A study in Ghana found that while payment rate was an important factor, timeliness in payment was the most important factor as it ensured financial predictability promoting a hospital efficiency and motivated staff.<sup>xxxv</sup> In a multi-country study that explored the knowledge of private health care providers with the National Hospital Insurance Fund and National Health Insurance Scheme in Kenya and Ghana, it was observed that healthcare providers experienced delays in payment of 6 to 8 months.<sup>xxxvi</sup> Delays in payments not only affected the availability of resources within the facilities (especially medications) but also delays in settling employee salaries and supplier bills.<sup>xxxvii</sup>

Currently the HIA is working with private providers to introduce level of effort coding using current reimbursement levels and a form of the CPT codes. The goal is to move towards a standard public sector fee schedule based on effort, recognizing that larger more specialized hospitals have different infrastructures and services to support. The HIA also recognizes the importance of quality and is introducing metrics in the revised provider contracts.

### Infrastructure Requirements

Ensuring a fair EHP requires data to measure, price and ultimately manage both claims patterns (how beneficiaries access and use healthcare services) and measure medical inflation (increase in medical costs annually). To facilitate effective data-mining, a standard coding classification system is required (both for diagnoses and procedures). This is complicated in Jordan as Hakeem uses an outdated diagnosis coding classification system ICD9 and the private sector (and most of the world) has moved on to ICD10. It is critical that there is one standard coding classification system in use. In addition to diagnosis codes, consider the adoption of an evidence-based relative value based procedure coding system. This will support the creation of a public sector fee schedule and a public sector pricing policy. Without standard coding, utilization and cost studies comparing providers will be limited.

For example, managing access to health care through pre-authorization processes is important, but it needs to be evaluated. In addition, chronic disease management programs rely heavily on claims data to identify which members would benefit from the intervention as well as to measure financial effectiveness of the program. To ensure the effectiveness of these types of programs, systems must capture sufficient detailed data.

From the procedure code perspective, the RMS has mapped evidence based procedure codes to an internal coding system that can be used within the entire public sector system for claims transactions. RMS coding is being mapped into the Hakeem invoicing system.

### General Recommendations:

*Defining an essential benefits package will be challenging but necessary.* The current CIP product is discriminatory and the risk premium is unknown as the care is funded, not insured. It will be important to consider not only the benefit requirements, but also the funding sources and innovative network concepts to improve access to healthcare related to the 2019 budget and legal restrictions.

- Traditional aspects to consider when developing and pricing an essential benefit package

#### Benefits:

- Run focus groups on the current insurance package, how it is perceived, what people want and what they will pay for.
- If current benefits are reduced, provide alternative solutions including access to supplemental health insurance products.

#### Link Benefits to Financials:

- Estimate the budget and funding sources (this requires decisions regarding social health insurance, single payer or two-tiered funding, use of private insurance, and use of private providers).
- Calculate an estimated budget.
- Agree upon the general categories of benefits including covered risks, use of prevention through primary care, and chronic disease inclusion and management.
- Identify vulnerable populations and impact to budget.
- Review the compatibility of the budget to proposed benefits and population.
- Calculate the risk premium and impact of coinsurance and copayments through predictive modeling based on cost and utilization of services across providers and geographies (assuming an evidence based standard coding classification like CPT codes based on level of effort, or relative value units).
  - To support the development of standard EHP premiums, create a pricing policy.

#### Provider reimbursement, quality:

- Identify which provider payment forms to introduce (public and private sectors) including full risk sharing (capitation), fee for service (some form of unit payment for services provided) and pay for performance (linking provider payments to clinical outcomes). This is tied to coding and adequate claims processing systems. Additionally, it is unclear how public hospitals will be reimbursed.
- Identify cost and benefits of care coordination and other quality initiatives.
- Define the standard coding classification system that will be required to participate in the program (diagnosis and procedure).
- To ensure the capacity to measure the EHP, evaluate current IT systems capacity to adjudicate claims based on the recommended product language and coding requirements.

#### Legal issues:

- CIP bylaw should be amended by adding new legislations that cover EHP (in process with the support of HFG) and include all areas noted above

- Ensure transparency and acceptability. The current CIP benefits are very generous to some portions of the population (e.g., VIP) who may be reluctant to lose those benefits. Therefore, moving to standard benefits and reducing current benefit levels may be difficult. To minimize the potential negative impact:
  - Adopt a rigorous review process to ensure access to quality care including use of evidence based practice review.
  - Manage expectations. If the proposed EHP reduces the benefits of selected populations, provide alternatives including “grandfathering” current higher classifications, or assigning the additional benefits a premium to be paid by the beneficiary.
  - Protect vulnerable populations from discrimination through subsidization as well as fair cost sharing (affordable copayments and coinsurance levels).
  - Develop an effective communications strategy to ensure product benefits and provider network (including use of a gatekeeper) are well understood.
    - Track and evaluate complaints and grievances to ensure product sufficiency and quality outcomes.

## Part 2: Proposed Initial Roadmap

To provide a vision of the EHP process, both USAID through HFG and the WHO support MOH by bringing strategic and operational perspectives that complement each other and result in a sustainable approach to product development (clinical prioritization) and ultimately financing. Table 1 below, highlights core areas addressed when establishing an EHP: clinical, financial, operational, and measurement. Within each pillar are strategic and operational aspects as well as selected outcomes.

Table 1: High level view of components addressed during the product development process

Strategic goal: Maximizing value for Jordanians and Residents through an Essential Health Package (EHP)				
Strategic	Clinical (transforming the way clinicians deliver health care) through evidence	Financial (maximizing resources): pricing, risk assessment, costing	Operational (achieving efficiencies) standard coding, adequate operational support	Measurement (tracking impact, making modifications)
	Ensuring quality, safety and value through people, processes, technology supported by law			
	<ul style="list-style-type: none"> <li>Clinical priorities</li> <li>HTA</li> <li>Strategic purchasing</li> <li>Primary Care (PCP)</li> <li>EHR (Hakeem)</li> </ul>	<ul style="list-style-type: none"> <li>Financing sources</li> <li>Financial priorities</li> <li>Cost of care and utilization patterns</li> <li>Specialty “carve outs” (Cancer care at KHCC)</li> <li>Risk pool</li> </ul>	<ul style="list-style-type: none"> <li>Operational priorities</li> <li>Standardization</li> <li>Communications strategy</li> </ul>	<ul style="list-style-type: none"> <li>Cost and utilization budgets</li> <li>Link to health status and outcomes</li> <li>Reduce medical and administrative costs</li> </ul>
	Tasks: Benefits (DCP3) WHO, clinical resources (pharma, PCP) (HFG), EHR (HFG)	Tasks: Standard price lists (TBD), provider contracting (TBD)	Tasks: Standard processes and coding (TBD), IOR (HFG)	Tasks: Compile Control Panel (TBD), create change process (TBD)
Operational	Measurements: % of population registered to a PCP, clinical outcomes	Measurements: medical loss ratio (MLR), actual days and visits/1,000 to budget	Measurements: turn around time (TAT), member satisfaction	Measurement: Demonstrated use of Control Panel
Outcomes				

When governments finance an EHP, medical care is funded but outcomes may not be measured or managed. This limits transparency and accountability because no one really knows what specific medical treatment was provided or if it was an effective use of government funds. In such cases, increasing medical inflation rates result in reduced benefits or higher premiums. Moving from a financing approach to one of public insurance contributes to sustainability:

- The product is affordable (premiums are pooled across a large population)
- Equal access is provided to all residents regardless of health or financial status
- The vulnerable are protected from medical risks and costs by addressing their needs in an understandable way
- Stewardship of resources is achieved by managing care through evidence based medicine including use of medical protocols and HTA (in consideration of bylaws).
- The product is a practical tool for improving service delivery because it is focused on effective interventions (e.g., DCP<sup>3</sup>)
- The costs and frequency (utilization) of care can be managed through provider network relationships so that the medical trend (increases of overall medical costs year over year) are reasonable. This is achieved through a monitoring process (claims and enrollment data, MOH statistics, etc.). Ideally, a *Control Panel* summarizes key trends in both public and private sectors. This is used when making pricing, network or other policy decisions.



To provide context to the concept of an EHP as an insurance product, clinical, financial, operational and measurement issues are outlined below including recommended next steps.

### Clinical (benefits, supply of services)

This includes the supply of medical personnel (public and private sector clinicians and facilities) interventions (procedures), preventive care and programs (including communications outreach) that will be included in the EHP.

According to the WHO Disease Control Priorities (DCP<sup>3</sup>) the approach includes<sup>xxxviii</sup>:

- a. Developing a model benefits package (based on government priorities)
- b. Identifying a subset of interventions deemed the highest-priority package (HPP)

As an example, the DCP<sup>3</sup> strategy to address osteoporosis includes primary prevention. The recommended intervention is physical activity and calcium and vitamin D supplementation.<sup>xxxix</sup>

This is a solid starting point. How well that intervention can be delivered is a function of a variety of factors. For example, we may find that there are too few primary providers available to provide this service (supply constraint) and that health literacy levels are very low (demand constraint), therefore even if the benefit is available, it may be difficult to access or individuals may not perceive benefit. That's where insurance product design approaches can provide support.

In insurance product development once, available financial resources are identified (amount of money available to cover the benefits and administration), market risk and provider supply are evaluated. For example, if 90% of CIP members in Irbid have uncontrolled congestive heart failure resulting in complications that are expensive and indicative of poor quality, we may seek to cover not only the chronic disease, but also evaluate the cost/benefit of community outreach to increase health literacy levels, or group medical visits to provide "coaching" including nutritional information and motivational techniques.

However, disease rates are only available at a country level due to inadequate claims collection in the public sector. To manage this gap, HFG is testing the concept of a modified health risk assessment ("modified underwriting") performed when CIP membership cards are provided. This approach could enable effective matching of proposed benefits to specific geographic risk profiles while providing the opportunity to study individual risk changes longitudinally.

Therefore, when the WHO recommends a certain benefit, HFG can provide context into this benefit and suggest alternative ways to cover. For example, in the osteoporosis example, we may find that while it is important, a bigger risk may be in the aging demographic being unable to get to the doctor's office. An alternative benefit could include transportation or home visits for the elderly or disabled with the associated impact on premium levels.

### Recommendation 1 Coverage elements

Identify core clinical coverage elements for EHP.

### Recommendation 2 Provider Network Strategy including reimbursement and impact on quality

Identify population size and geography and provider availability (primary care, specialty care, and inpatient) considering both public and private sectors. Review and recommend provider payment for both public and private sectors including impact on quality.

### Recommendation 3 “Modified Underwriting”

To support Recommendations 1 and 2, evaluate potential for “modified underwriting” to have an impact. There is evidence that prevention reduces future medical costs. For example, the costs to treat precancerous lesions are lower than to treat invasive cancer.<sup>xi</sup> In addition, for those with diabetes, lower HbA1c levels have been shown to be associated with reduced complication rates, and those who have improved glycemic control typically experience lower medical costs.<sup>xii</sup> To help identify population health risks and openness to receiving help, present the concept of *modified underwriting* as a way to obtain some data on the health risks geographically (personal health characteristics like smoking and body mass index and family history of illness) *PLUS* behavior and attitudes (preventive screening use, stigma of mental health issues, and health literacy). **(HFG Workshop February 2019)**

### Financing

The cornerstone of any insurance product is knowing how much money there is to spend not only on the healthcare, but also on the administration of the product which includes IT claims systems and processes. In markets where claims are manually adjudicated, up to 30% of insurance costs are administrative (in the US it is <10% due to automation). The goal is to reduce the administrative component of claims adjudication so that more money is spent on medical care. One way to accomplish this is through standardization (e.g., standard claims forms and coding). HIA is working on this with Hakeem (an electronic health recording system) however there is not a billing module within Hakeem. The RMS is building a claims module including RMS relative value based procedure coding. This system may be of value to other public hospitals embarking on using Hakeem. However, these data will not be comparable to the private sector as the third party agreements (TPAs) appear to use a variety of home-grown codes based on the JMA fee schedule which is non-evidence based.

When considering funding sources these include government taxes (including “sin” taxes), and individual and/or employer premium contributions. One way to increase available financial resources is by making EHP coverage mandatory. In this way, the healthier risks contribute to the system even though they may not experience a health event during the year. When preventive care is included in an EHP, healthy risks receive benefit from the program even if they don’t experience a health event requiring treatment.

### How much you have to spend dictates your benefit levels

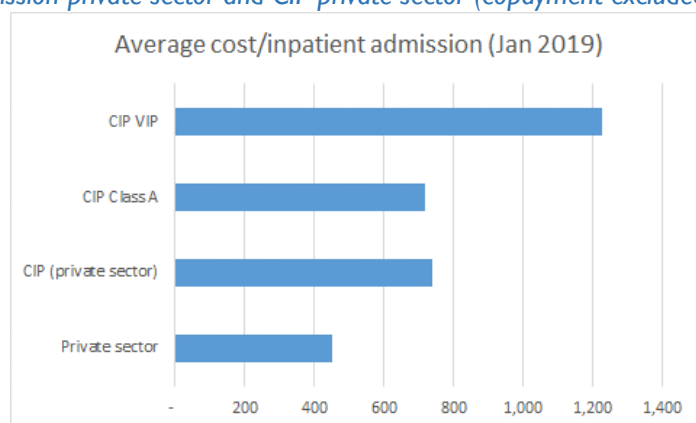
The amount of money you have to spend on a product will determine your benefits. Although it is important to ensure the benefits provided deliver *value*, in the long-term they have to be affordable. While most agree that the current CIP bylaw allows for generous access and is likely unsustainable, it will be very difficult to remove it.

The CIP regulation is not a product, but open language that makes claims adjudication difficult. The impact on claims cost is obvious. For example, the average private sector admission (per MedService the HIAs TPA) is JD 739. For the CIP VIP class it is JD 1,226 (see table 2). While the VIP class is likely older and suffers from more co-morbid conditions (e.g., hypertension, diabetes, etc.), the difference seems high. Further complicating the ability to manage claims costs, the CIP VIP product has no pre-authorization requirements and very few claims controls. It is essentially a free pass for physicians and hospitals in the private sector to bill anything. Overutilization of medical services is considered a quality concern. The goal is to provide the right care at the right place at the right time. A pre-authorization process supports this goal.

One approach to begin the conversation is to calculate the premium for the VIP membership. This can be done with relative confidence as most (if not all) medical claims for this group likely occur in the private sector where there is sufficient claims experience. This exercise will open a dialogue on the

actual premium levels for at least part of the CIP. These costs can be extrapolated across the entire population to provide a price for the open access to healthcare.

*Table 2: average cost per admission private sector and CIP private sector (copayment excluded)*



#### Recommendation 4 Funding Model decision, entitlements, role of Private insurance

Discuss social health insurance, models (single payer, two tier) and funding sources with appropriate decision makers to identify the structure of the EHP. Determine role of private insurance.

Create a process to identify which groups would be entitled to subsidized benefits including guidelines for inclusion.

Evaluate the impact to risk pooling and ensuring appropriate financial protections. This includes who will be covered for which services, and the impacts of coinsurance and copayments.

#### Recommendation 5 Estimate premiums of current CIP (VIP, Class A)

To understand current premiums (private sector only) calculate the premium and frequency of claims IP and OP in the VIP product. MedService has only 1 month of claims, but in 6 months you may have enough data to calculate the medical component of the premium and part of the administrative costs, but add an estimate of the administrative costs for the HIA (enrollment, network, claims).

#### Price/Claims/Network

Clinical events have associated costs. Cost is the expense incurred for a product or service. In health insurance the price is the agreed upon amount the provider will accept typically through a network contract. Fee schedules are a challenge in health insurance management, particularly when there is non-standard coding and a non-evidence based approach to costing the service.

The total cost is a function not only of the unit cost but also of the frequency. Insurers can manage overutilization of specialty outpatient services in a variety of ways including a gatekeeper (primary care doctor manages specialty referrals) and member copayment levels.

Another health claims issue that impacts total price is the practice of over-billing on line items that are difficult to control. For example, a review of private inpatient claims in Jordan revealed billing and paying for variety of latex gloves and nurses' caps during the same intervention. Rather than billing for each supply item, many network contracts work to "bundle" costs together which reduces the potential for fraud and abuse. This is called a "per Diem" or per day cost that will vary from a medical/surgical overnight to that in the ICU where more supplies are typically required.

#### Cost of care in the public sector is unknown

Unfortunately, it is impossible to calculate with certainty the cost of care in the *public sector* where presumably most of the medical treatment for the CIP occurs. This is due to the fact that there is not a claims process including standard coding and evidence based fee schedules. Hakeem (the electronic health record) is intended to address this issue in the future. The Royal Medical Services (RMS) appears to be moving quickly to develop a billing system within Hakeem. Fortunately, the RMS procedure codes are evidence based and can support the development of a public sector fee schedule.

In the meantime, one way to get a sense of the cost and utilization challenges is through a “claims repricing” exercise. This would involve pulling a sample of files including both inpatient and outpatient coverage and essentially creating a claim from it and applying costs possibly even a % discounted fee from the JMA fee schedule (Jordan Medical Association, private sector).

**Cost of specialty care in the private sector is based on provider opinions of what they believe they should be reimbursed (not based on evidence)**

In the *private sector*, HFG is in the process of a claims repricing exercise to test the network contracts with providers and provide insight into future contracting. This included getting paper claims from CIP members treated in the private sector. These claims will be shared with other TPAs or insurers with solid claims systems to determine what they would have paid. This will give us a sense of the effectiveness of the claims processes and network contracts at different companies as well as the potential for standardization. It will form the basis of the next provider contracting session with the HIA where the HFG will analyze real claims and see if/how the HIA provider contract could address issues. For example, strategic purchasing concepts may be helpful in managing the facility component of the claims or durable medical equipment.

Inpatient codes include both facility and professional costs. Our anecdotal claims repricing showed that 45% of the total inpatient claims costs were professional (provider), which appears high. Unfortunately, the professional costs cannot be managed through network arrangements because the Jordan Medical Association (JMA) fee schedule is the law. However, the JMA fee schedule is based on opinion not on facts. The JMA increased the units of work in a procedure based on opinion not evidence. By comparison, the CPT codes (and RMS procedure coding system) are based on units of work *which rarely change*. The only change is the dollar amount that is multiplied by the units of work to determine the provider reimbursement. Given the need for the private sector in providing access to public sector patients, the extreme nature of the JMA fee schedule will have a negative impact on the ability to provide healthcare to those who need it.

**Recommendation 6 Complete “Claims Repricing” to estimate network and claims opportunities**

Continue with the private sector claims repricing. Based on outcome, consider a similar exercise with the public sector (Bashir and RMS). Weave results into the HIA contracting session. **(HFG February/March 2019)**

**Recommendation 7 Review the potential to use RMS procedure coding for EHP**

Introduce one set of procedure and diagnosis codes for the public sector. Evaluate the potential to use the RMS coding across the EHP.

**Recommendation 8 Estimate the variability of costs in public and private sectors**

Review the JMA fee schedule to estimate the difference between medical costs in the public sector and estimate how many members will be unable to receive medical treatment based on the private sector fee schedule. Present the case that the JMA fee schedule is not based on any evidence but is only the opinion of the JMA and will negatively impact EHP sustainability.

Determine any opportunity to contract for public insured persons within the private sector with risk-sharing or modified fees for volume.

## **Frequency of care**

### Provider driven frequency (demand)

While unit cost is important in determining the price, so is frequency. This figure is typically calculated through claims data. This is important because a procedure may have a low unit cost but be over-performed (overutilization). This is a quality issue.

The primary claims data source is from the private sector through MedService (new Third Party Administrator “TPA” who adjudicates and pays private provider claims on behalf of the CIP). MedService is very open to providing standard reporting to identify claims trends that may be managed through provider contracting. However, the bulk of the CIP medical care is delivered in the public sector where there are no claims. Other ways to determine claims frequency in the public sector are to use data from other countries or make an educated guess.

Frequency is a problem in the private sector. For example, one Jordanian specialist charged for 26 CIP individual outpatient specialty visits during a three hour window. It’s unlikely that he only saw CIP patients during that time frame. This means that he likely did not spend much time with each patient, and likely simply dispensed pharmacy prescriptions for chronic patients. This pattern can be controlled from the product perspective (tiered copayments for chronic care at specialty networks) as well as from the network perspective (provider bonus pool for adherence to quality Key Performance Indicators (KPIs)).

### Member driven frequency (demand)

It’s not just providers who determine frequency, but also members. If the product benefits exclude member copayments or a gatekeeper (primary care model), then members may arbitrarily use medical services without much thought. Additionally, members with low health literacy may not be able to manage their healthcare, so they end up utilizing the system more frequently.

Historic claims trends can help identify this pattern. But when it is not available (as is the case in Jordan public sector) we can try to identify and manage this in a few ways. For example, if we learn from the “modified underwriting” that the health literacy levels are low with members having chronic kidney disease, we may price a case management program to ensure members are managing their disease effectively.

Preliminary results from the HFG claims repricing exercise found anecdotal evidence of members using the private sector emergency room as a primary care doctor. Any time an emergency room visit does not turn into an inpatient, it is not an emergency. This is difficult to control because we don’t want emergency rooms to automatically admit everyone. On the other hand, we want to discourage members from this behavior pattern. This can be achieved through increasing the copay for ER access, (can do this through introducing a higher copay for ER access). But will members comply? One way to estimate the level of trust in the public system is through “modified underwriting” where we can identify barriers to introducing a public sector primary care model. This can be managed through product language including “medical necessity,” ER authorization processes, and tiered copayments.

## **Measurement**

It is imperative that any EHP be measured to ensure patient safety and manage medical inflation. Through this process the EHP can be evaluated and product, network, incentive modifications be

identified. We suggest that some form of a Control Panel be developed as a way to budget and manage an EHP.

Traditionally a control panel includes enrollment and claims trends. This must be a goal in the long term. To achieve this, the government can require any provider treating a CIP member to abide by their rules including: use of standard claims forms, prescribed relative value based procedure code, diagnosis codes, pre-authorization and achievement of Key Performance Indicators (KPIs).

#### Recommendation 9 Review potential to modify provider fee schedules

Based on the claims repricing (private sector), discuss outcomes and impact on provider contracting (in process). Evaluate and propose path forward for standard coding and claims forms.

#### Recommendation 10 Introduce a Control Panel to monitor network and claims trends

For the private sector claims, work with MedService to develop standard reporting for HIA including training on how to use the data to modify network contracts and audit providers.

#### Recommendation 11 Develop a quality strategy

Identify the methods to test the quality of the EHP including both member and provider satisfaction scores as well as clinical outcomes measurements

#### Recommendation 12 Review Hakeem invoicing to ensure adequate invoicing data capture

For the public sector, review the billing module of Hakeem including the RMS billing module as well as the capacity to bridge ICD9 to ICD10. MedService indicated they were in the process of building an ICD9 to ICD10 Bridge, which may be useful to Hakeem. **(HFG pending)**

## Summary

Taking into consideration the current health financing in Jordan and the variable benefits provided to CIP members today, development of an EHP would be a feasible and cost effective step for Jordan to consider to reform insurance and pave the way to universal health coverage because it effectively addresses critical gaps in current coverage including: (1) *standard benefits* for all members (avoiding discrimination); (2) *sustainable financing* either through an insurance product or government payment whereby incoming funds cover the actual costs of medical care and administration, (3) *quality outcomes* supported through standardized coding combined with expanded use of Hakeem.

An EHP is a step towards universal health coverage. However, universal health coverage cannot be achieved unless both health systems and financial risk protections are accessible, affordable and acceptable.<sup>xiii</sup> Achieving these goals requires prioritization of several policy changes including those mentioned in this document.

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<sup>i</sup> Michael Lewis, "Definition of a Health Insurance Policy," *Money Crashers, Lifestyle*, <https://www.moneycrashers.com/how-does-health-insurance-work/>

<sup>ii</sup> Ibid

<sup>iii</sup> Ole Doetinchem, Guy Carrin, and David Evans, "Thinking of introducing social health insurance? Ten Questions," *World Health Report (2010) Background Paper, No 26*. [https://www.who.int/healthsystems/topics/financing/healthreport/26\\_10Q.pdf](https://www.who.int/healthsystems/topics/financing/healthreport/26_10Q.pdf)

<sup>iv</sup> Greg Irving, et al., "International variations in primary care consultation time: A systematic review of 67 countries," *British Medical Journal* (2017) <https://bmjopen.bmj.com/content/7/10/e017902>

<sup>v</sup> David B Evans, Justine Hsu, and Ties Boerma, "Universal health coverage and universal access," *Bulletin of the World Health Organization*, (2013). <https://www.who.int/bulletin/volumes/91/8/13-125450/en/>

- 
- vi Ibid
- vii Ibid
- viii N A Obeidat, et al. "Are Jordanian primary healthcare practitioners fulfilling their potential in cancer prevention and community health? Findings from a cross-sectional survey," *BMJ Open*, (2017).  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5558813/>
- ix Ibid
- x David B Evans, Justine Hsu, and Ties Boerma, "Universal health coverage and universal access," *Bulletin of the World Health Organization*, (2013). <https://www.who.int/bulletin/volumes/91/8/13-125450/en/>
- xi Ole Doetinchem, Guy Carrin, and David Evans, "Thinking of introducing social health insurance? Ten Questions," *World Health Report (2010) Background Paper, No 26*.  
[https://www.who.int/healthsystems/topics/financing/healthreport/26\\_10Q.pdf](https://www.who.int/healthsystems/topics/financing/healthreport/26_10Q.pdf)
- xii Ibid
- xiii Ibid
- xiv Ibid
- xv Ibid
- xvi Ama Pokuaa Fenny, Robert Yates, Rachel Thompson, "Social health insurance schemes in Africa leave out the poor," *Oxford International Health* (January 2018). <https://academic.oup.com/inthealth/article/10/1/1/4794744>
- xvii Ibid
- xviii Ibid
- xix Ibid
- xx Ibid
- xxi N A Obeidat, et al. "Are Jordanian primary healthcare practitioners fulfilling their potential in cancer prevention and community health? Findings from a cross-sectional survey," *BMJ Open*, (2017).  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5558813/>
- xxii Ibid
- xxiii Ibid
- xxiv Abd Hasan, Mahmoud Musleh, "Public Stigma toward Mental Illness in Jordan: A Cross-Sectional Survey of Family Members of Individuals with Schizophrenia Depression and Anxiety," *Journal of Psychosocial Nursing and Mental Health Services* (55(6):36043). (June 2017)  
[https://www.researchgate.net/publication/317364553\\_Public\\_Stigma\\_Toward\\_Mental\\_Illness\\_in\\_Jordan\\_A\\_Cross-Sectional\\_Survey\\_of\\_Family\\_Members\\_of\\_Individuals\\_With\\_Schizophrenia\\_Depression\\_and\\_Anxiety](https://www.researchgate.net/publication/317364553_Public_Stigma_Toward_Mental_Illness_in_Jordan_A_Cross-Sectional_Survey_of_Family_Members_of_Individuals_With_Schizophrenia_Depression_and_Anxiety)
- xxv JS Kazungu, EW Barasa, M Obadha, J Chuma, "What characteristics of provider payment mechanisms influence health care providers' behavior? A literature review," *Int J Health Planning Management*, (Oct 2018).  
<https://www.ncbi.nlm.nih.gov/pubmed/29984422>, <https://onlinelibrary.wiley.com/doi/full/10.1002/hpm.2565>
- xxvi Ibid
- xxvii Ibid
- xxviii Ibid
- xxix Ibid
- xxx Ibid
- xxxi Ibid
- xxxii Ibid
- xxxiii Ibid
- xxxiv Ibid
- xxxv Ibid
- xxxvi Ibid
- xxxvii Ibid
- xxxviii DCP3 Universal Health Coverage and Essential Packages of Care (<http://dcp-3.org/>)
- xxxix Ibid
- xl "International Conference on Cancer in the Middle East and Africa, (Associacion Lalla Salma De Lutte Contre le Cancer. (2012) [https://www.contrelecancer.ma/site\\_media/uploaded\\_files/The\\_Marrakech\\_Call\\_-\\_Recommendations.pdf](https://www.contrelecancer.ma/site_media/uploaded_files/The_Marrakech_Call_-_Recommendations.pdf)
- xli K Fitch et al., "Medical claim cost impact of improved diabetes control for medicare and commercially insured patients with type 2 diabetes," *J Managed Care Pharm* (2013). <https://www.ncbi.nlm.nih.gov/pubmed/24074007>
- xlii David B Evans, Justine Hsu, and Ties Boerma, "Universal health coverage and universal access," *Bulletin of the World Health Organization*, (2013). <https://www.who.int/bulletin/volumes/91/8/13-125450/en/>