Operational Manual:

NHI PHC Services Contracting

"PHC will be the heartbeat of the NHI. PHC starts in the communities and is the first level of contact with the health system by individuals, the family and community."

Clause 158/159, White Paper on NHI, 2015

Professor Shabir Moosa
20th April 2019

EXECUTIVE SUMMARY

BACKGROUND

In South Africa, as at March 2017, there were 55 million people, with 9 million people using private medical schemes costing R151 billion whilst public sector health expenditure cost R168 billion for the rest of the population – 46 million people. The government is seeking to re-engineer primary health care with National Health Insurance (NHI) in a single publicly owned and administered strategic purchaser (NHI Fund). The NHI Fund is expected to actively purchase primary health care (PHC) services on behalf of the entire population directly from public and private contracted providers using capitation payments and a gatekeeper role to referrals. South African experiences of capitation are limited to a private mixed capitation model servicing 400 000 people with private general practitioners (GPs), who are paid a fixed capitation rate (adjusted by age and gender) and a discounted fee per visit. GPs are limited to a list of medicines, tests and basic x-rays. The international literature strongly advises a mixed capitation payment system, with capitation as the most dominant element, fees for specific services that need higher utilization and payment for performance that is large enough to be of consequence. There is no strong evidence for the optimal mix and it depends very much on context.[1–3]

The NHI Bill of 2018 sets out some clear guidelines to transform the current South African health landscape. A Contracting Unit for Primary Care (CUP) is seen as a future subset of the NHI Fund at a sub-district level and is still to be set up. A key principle of NHI is a purchaser-provider split. This means that current public service providers will need to be made independent of the District Health Management Office and the NHI Fund in a legal governance structure that will need to be defined by the NHI Act. It is likely that the public service provider would need to be re-organised into decentralised contracting units at a sub-district or CHC-Clinic complex level. The service package for first contact care is currently defined as a clinic providing diagnosis, management, prevention and health promotion in the facility and in the community.[4] There are also shared services provided at community health centres (CHCs) (as the first referral point for clinics): after-hours and emergency care, maternity-obstetrics and allied healthcare. The NHI laudably aspires to accredited multidisciplinary group practices as a contracting framework. The current public service context suggests that this is ambitious as CHCs with doctors and other multidisciplinary services are far from pervasive across South Africa.

The National Treasury allocated a conditional grant to the National Department of Health to test the feasibility of contracting PHC services out GPs. National Treasury bid out for the design and costing of a capitation contract, with the deliverable of a draft contract and operational manual. There was an extensive literature review around capitation systems globally and in South Africa. This is the operational manual that sets out the elements of the contract and rationale of the contract design. The contracts and appendices are attached.

PROPOSED SERVICE DELIVERY PLATFORM

The proposal for the first phase of PHC contracting is to set up a **Community Practice as a basic unit of ambulatory primary health care** for a panel of up to 10 000 people.

Any accredited publicly-owned clinic or CHC (legally part of a PHC Trust to be defined by NHI), Non-Profit Organisations (as legally allowed currently) and private general practitioners (GPs) or family physicians (FPs) (as solo, partnership, incorporated company or association as required by the Health Professions Council of South Africa (HPCSA)) should be able to contract for Community Practices under NHI. A District Management Specialist Team (DMST) in the District Health Management Office (DHMO) should support clinic readiness. Funds should flow from National Treasury to the NHI Fund. The NHI Fund (and NDOH in the interim) should competitively tender the administration of this contract to private medical scheme administrators by provinces to create a competitive administration market. The NHI administrator should process applications as per terms of contract and within twenty days of application, providing written reasons for refusals. Contracted providers may not sub-contract without approval by the NHI Administrator to ensure integrity of contracting. Contracted providers need to keep a register of all gifts to prevent any out-of-pocket requirements from patients. All deaths must be reported and an arrangement needs to be place for service liability, and professional and public indemnity.

BASIC PHC SERVICE PACKAGE

The service package is proposed to approximate the current clinic service but with the addition of a full-time doctor to the team. The team should care for this defined practice population (with consultations, medicines and tests), and access to some shared services (e.g. X-rays). The basic PHC service package for a Community Practice is proposed to cover ambulatory care commonly and easily available in standalone clinics / practices, with a doctor. The user should be entitled to any number of visits as needed at no cost. The service should cover diagnosis, management, prevention and health promotion across facility and community (using practice-employed community health workers). This should be based on the PHC elements of the 285 Guidelines in South Africa and includes:

- Acute care and minor ailments
- Communicable diseases (HIV-TB etc.)
- Non-communicable diseases (DM, HT etc.)
- Maternal and Child Health,
- Mental Health for Primary Care
- Palliative Care for Primary Care

These services should be provided for a minimum of forty hours a week. Contracted providers must do a Comprehensive Health Check on every enrolled user every five years. The package to users should include a list of medicines and laboratory investigations that is sufficient for doctors to function in the Community Practice but restricted to support rational use. These should be paid for on a claim basis. A narrow list of preventive services and office-based procedures should be paid for separately on a fee-for-service basis. The basic PHC service package boundaries should be refined as the contracting evolves year-by-year, with supervised peer review by doctors from contracted providers, revised performance outcome measures and national negotiation in a regulated forum including representatives of contracted providers. Contracted providers should be expected to provide after-hour services locally for their enrolled population as part of the service package, preferably as groups.

Medical schemes should implement the NHI Community Practice network as a prescribed minimum benefit for PHC.

ORGANISING PRINCIPLES FOR SERVICE DELIVERY PLATFORM

Contracted providers should develop a community profile with data on the full practice population (using community health workers (CHWs) where possible as part of their employed team), state resources, community inputs and practice data. Contracted providers should act on this with clear plans for prevention at all levels. Contracted providers should engage their practice community in an annual open day-workshop to set community priorities. Contracted providers should establish and maintain a community forum comprising members elected annually from within the contracted providers panel of members. The contracted provider should engage at such frequent intervals as the contracted provider agrees with the community forum.

Minimum clinical personnel standards should be set at one full-time accountable doctor per 10 000 people to lead the team (using the World Health Organisation unit of measure for doctors per population), one full-time nurse per 2000 people and one full-time clinical associate per 5000 people as an active part of the team providing care directly to the practice population. All professional personnel employed should be registered with the NHI Administrator on a national database and should be explicitly named in all claims and encounters to enable review. Community Practices should have community health workers (CHWs) at one CHW per 1000 people, paid for in addition to the capitation.

There should be room for more service innovation, with further layers of contracting planned for the future with groups of Community Practices. A bonus of the capitation fee could be paid to Community Practices that demonstrate broader multidisciplinary team-based care. Maternity-Obstetric Services, Dentistry/Optometry, Allied Health Care, Specialist Care, Hospital Referral Saving, Hospital Commissioning and Gap Contracts should be included progressively.

The District Health Management Office should create a district-level forum for coordination and integration of all service providers.

OPERATIONAL REQUIREMENTS FOR SERVICE DELIVERY PLATFORM

Contracted providers should be expected to fill in an Accreditation Checklist and Application Form and submit these to the NHI Administrator for approval. The OHSC has inspection capacity challenges currently. However, accreditation can begin quickly and at scale by getting interested providers to do a self-assessment and submit their application for approval by the NHI Administrator. The OHSC (or independent providers contracted for this task e.g. COHSASA) should then do random audit inspections 1.25 times per 5 year cycle on all contracted providers.

All users in a district (eligible as per NHI Bill) should be informed by the NHI administrators of a list of accredited contracted providers (whether accredited clinic or GP/FP) and asked to make their own choice on enrolment. Users should be told to approach their contracted provider of choice with their ID and enrol / register on the Health Patient Registry System in the Contracted Providers rooms. Any Enrolled User

not seen within five years should be followed up to consult for a 'Comprehensive Health Check' to educate on enrolment, assess risk and create health plans. This could be paid on a separate fee-for-service basis, considering its additional value. Enrolled Users can change their contracted provider annually by going to another contracted provider and filling in the form to change automatically. There may be a policy decision to allow six monthly changes for the first twelve to twenty four months and thereafter annually. Contracted providers should have online access to the HPRS to register users in their facilities and to ensure users are not enrolled elsewhere.

Contracted providers should consider user requests for a second provider in another district to allow minimum disruption to care due to work as well as out-of-province visits considering emergencies in rural home visits. Contracted providers should arrange this between themselves.

The administrator should collect information using practice management software e.g. consultations, ICD10 codes to allow a considerable understanding of the clinical interactions to manage performance. However in terms of a five year performance management plan contracted providers should obtain an Electronic Health Record (EHR) that has access to the HPRS and is accredited for interoperability (with minimum standard variables and IT interoperability). These should feed into a national health information exchange that is shared between all NHI Administrators contracted across South Africa. Mobile health for CHWs should be mandated for use together with these EHRs.

NHI-Contracted Providers should refer all their users for specialist, hospital and allied health care to a designated NHI Referral Network (set up on Vula software and supported by an NHI-appointed family physician coordinating referrals starting within the public service). Accountable doctors should be able to consult with this NHI network using Vula.

The Diploma in Family Medicine should be mandatory for all NHI-contracted accountable doctors with less than 15 years of experience. All doctors from contracted providers should be mandatorily expected to be part of a local, accredited and supervised peer review group in the NHI Referral Network.

FINANCIAL MODELLING AND COSTING

This contract is proposed as a mixed capitation payment system, with capitation at its core, fee-for-service for specific services and payment-for-performance underlining it's value-based approach.

The capitation base fee should be adjusted for age, gender, practice size, chronic conditions and deprivation. Rural adjustments are required for geographical differences in capital and labour. Health professionals need to be incentivised to move into rural communities. Payment of capitation fees should be monthly in advance by the NHI Administrator into the bank account of the contracted provider as stipulated in the contract. Preventive services and office-based procedures should be paid on a fee-for-service basis. Medicines (with dispensing fee) and laboratory investigations should be paid on a claim basis and within 30 days of claim. CHWs should be paid for additionally on the basis of one CHW to 1000 enrolees.

Pay-for-performance should be focused on chronic care and prevention using best evidence clinical practice guidelines, and should be transparent. There should be peer-based scorecards that measure clinical process and outcome of care, patient experience and costs. Pay-for-performance as a percentage of overall payment should be substantial, with up to 20% preferred. The process should be phased in. It needs regular random audits. Payment should made quarterly and retrospectively to smooth cash flow. There are a number of performance measure including HEDIS, QOF, ICHOM, PROMs that could be included in the future.[5–10] The key would be to look at data that is possible to collect currently using software in the market and to jointly coordinate the development of a standard interoperable set of performance indicators that are collected routinely from contracted practices, given that an electronic health record is to be made mandatory. Some useful performance outcomes are suggested from JLN Performance Indicators, Ideal Clinic Criteria and Quality Outcomes Framework. The proposal is for performance indicators to be few and very practicable given that EHRs may not be available immediately, and that basic claims and ICD10 data may be all that is collected using payment management software and electronic data interchange with NHI administrators. A five-year performance management plan should be adopted with the expectation of electronic health records in place within two years and strong outcome-based indicators by year five.

Services should generally be delivered in the contracted providers own facilities. The playing fields should be made completely level between public and private sectors to allow universality and appropriate cost-management. Facility/information technology costs should be supported as part of the capitation. Contracted providers may also negotiate to rent a clinic or CHC space and be seconded public service staff still employed by the government. A minimum pre-payment of R50 000 per month for six months from contract initiation should be made by the NHI administrator to especially engage young doctors.

Value-Added Tax on Provider Income, rates on property owned as well as depreciation on equipment should also be factored into pricing.

WAY FORWARD

Contract: A draft capitation contract has been prepared.

Monitoring & evaluation: Any implementation of payment reform needs to have evaluations planned from the start.

Engagement: It is important to ensure a representative group is engaged, common ground is explored to build collaboration, trust is built slowly and that this process continues with regular consultative processes with joint agenda setting.

2 x 7 simple steps for feasibility testing

National Steering Committee / Province

1. Approve draft capitation contract, operational manual and costing framework (including pay-for-performance).
2. Approve feasibility testing sites
3. Explore political, project and change management strategy

4. Tender out monitoring & evaluation (5%)
5. Tender out administration (5%)
6. Accredit practice management software for pay-for-performance
7. Arrange / Support operational elements of the contract
    a. Enrolment (including HPRS set up and link to administrator)
    b. Drugs access (including pharmaceutical wholesaler arrangements)
    c. Labs access (including NHLS arrangements)
    d. Radiology access (including developing contract and pricing)

<u>District / Sub-District</u>

1. Identify specific sub-districts and/or vulnerable population sites and/or geographical bounds of tender with related providers e.g. Clinics, GPs/FPs and NGOs.
2. Set up a District Management Specialist Team (DMST) to support clinic readiness and the development of PHC Trusts for accredited clinic/s as legal bodies able to contract and manage funds (even as an auxiliary fund to current clinic budgets to address PFMA issues).
3. Engage Sub-district Management and set up Local NHI Team/s
4. Ensure / Support functionality of operational elements of contract
    a. Accreditation (supporting appointed administrator)
    b. Enrolment (supporting HPRS process for Contracted Providers)
    c. Drugs access (supporting local access for Contracted Providers)
    d. Labs access (supporting local access for Contracted Providers)
    e. Radiology access (supporting local access for Contracted Providers)
    f. NHI referral network locally for Contracted Providers (including appointment of NHI family physician (for peer review / training), clerk and nurse)
5. Ensure targeted communities are prepared for NHI contracting by contracted providers.
6. Engage Clinics, GPs/FPs and NGOs to prepare for contracting as contracted providers.
7. Tender out Community Practices to contracted providers for ±100 000 people using PHC capitation contract and operational manual

INTRODUCTION

This project entitled, “Provision of technical advisory services to National Treasury to support the implementation of the National Health Insurance (NHI) reforms (pn1001) capitation contract model” formed a part of a set of projects funded by the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) to support the development of NHI in South Africa. Government Technical Advisory Centre (GITAC), an agency for the National Treasury, awarded a bid to Health Advanced Institute (HAI) to design an NHI capitation contract for PHC and a bid to Percept Health to develop the financial modelling and costing.

The overall objective of the design project was to contribute to provider payment reforms under the NHI by developing service specifications, contracting arrangements and draft contracts for paying contracted Providers (including private GPs) through capitation. The specific objective is to enable the move from working hour-based payments towards capitation-based performance linked payments, including for private service providers by developing a model contract with templates for capitation-based contracts. This work is expected to improve understanding of capitation models and related concepts amongst key stakeholders and officials better capitated in contracting GPs.

According to the terms of reference (TORs), the project was focused around four main tasks. This includes: an inception report on the literature and recommended model/s; draft service specifications; a model contract and an operational manual.

We recognised the importance of stakeholder’s involvement in the development of the contracting model. Therefore, we established regular engagements with key stakeholders. Our intended goal was to build consensus around service specifications and for the financial model to be closely linked to and built on service specifications.

After being briefed by the team from National Treasury on 31st May 2018 a series of engagements were arranged:

1. 8th June 2018 - Teleconference Dr Anban Pillay to brief on project
2. 8th June 2018 - Team meeting with Shabir Moosa, Shivani Ranchod and Tihomir Strizrep on way forward
3. 8th June 2018 - Skype conversation with Cheryl Cashin and Michael Chaitkin to explore process and international support
4. 10th/12th June 2018 – HAI Team Consultations on work process
5. 13th June 2018 – Meeting with JM Tucker and Nikhil Khanna of Clinton Health Access Initiative to examine model and service package issues
6. 18th June 2018 – Meeting with Industrial Development Corporation executives on infrastructure support
7. 18th June 2018 – Meeting with Prof Roseanne Harris and senior executives of Discovery around capitation costs.
8. 20th June 2018 – Skype with Jacqui Stewart of COHSASA on accreditation
9. 20th June 2018 – Meeting with Victoria Barr of FTI Consulting on support
10. 21st June 2018 – Teleconference with Maggie Munsamy of NDOH on CCMDD Project
11. 22nd June 2018 – Meeting with Brian Ruff of PPOServe on GP Care Cell Project and Alberton Commissioning
12. 22nd June 2018 – Meeting with Kamy Chetty of NHLS on PHC tests and access

13. 26th June 2018 – Meeting with Gustaaf Wolvaardt of FPD on GP contracting
14. 27th June 2018 – Meeting with Moremi Nkosi and senior executives of Medscheme around capitation costs.
15. 29th June 2018 – Meeting with Guni Goolab and and senior executives of GEMS around capitation costs.
16. 4th July 2018 – Teleconference with Siphiwe Mndaweni of Office of Health Standards Compliance around accreditation issues
17. 4-6th July 2018 – Series of meetings with Mark Blecher, Anban Pillay, Shivani Ranchod and Tihomir Strizrep to finalise broad strokes of model
18. 9th July 2018 – Meeting with Katlego Mothudi and researcher of Board of Healthcare Funders to discuss model and implications
19. 9th July 2018 – Presentation of model to NDOH Executive Team members
20. 18th July 2018 - Meeting with Sipho Kabane of Council of Medical Schemes (CMS) on interaction of NHI Capitation with Medical Schemes
21. 23rd July 2018 – Webinar arranged by JLN involving senior UHC experts from JLN, Estonia, Moldovia, Nigeria and Mongolia on the proposed model
22. 25th – 27th July 2018 – Teleconferences with Victoria Barr of FTI Consulting
23. 26th July 2018 – Engaged participants of Private Health Information Systems Consortium (PHISC) Annual Meeting on EHRs/NHI
24. 26th July 2018 - Meeting with Prof Roseanne Harris and senior executives of Discovery around capitation costs.
25. 30th July 2018 – Presented design proposal to NHI Workshop for Steering Committee
26. 31st July 2018 – Presented design proposal to NHI Workshop for Steering Committee and national representatives of GPs and related stakeholders
27. 6th August 2018 – Briefed Ulundi Behrtel on model for development of draft legal contract
28. 15th August 2018 - Teleconference with Milani Wolmarans on HPRS issues
29. 16th August 2018 - Teleconference with Victoria Barr of FTI Consulting and Shivani Ranchod on final report
30. The team from National Treasury and National Department of Health have reviewed the contract and made revisions in September 2018. The revised contracted was submitted by 31st October 2018.

There was also a research process underway during this period with ethics waiver provided on 15th June 2018. A Delphi Study on the Model Contract with ±100 generalist leaders has produced draft results. The other studies will be undertaken progressively as part of an academic exercise. We will be engaging these same generalist leaders in a Delphi Study on Practice Costs. An article on Keycare costs is underway. A national GP survey will be undertaken based on the design and parameters of concern. The mapping study is outstanding. In addition we have asked generalist leaders to help us set up seven more groups of expert generalist doctors to better define the following elements using seven concurrent Delphi processes to be undertaken to ensure the lists below are robust.

1. Accreditation Criteria
2. Equipment
3. Medicines
4. Lab Tests
5. Radiology
6. Procedures
7. Performance Outcome Indicators.

An Inception Report has been provided and includes an extensive literature review. A draft Services Specification report has been provided, with appendices to support this. The Final Report was a summary of the overall project, with a brief background, brief description of process, recommendations and way forward. The draft Contract was revised since the Final Report, and re-submitted in October 2018 with appendices to support these. This Operational Manual has been revised in April 2019 to align with the revised contract. This should serve as a basis for further negotiation and planning.

The **Contents** of this Operational Manual are:

BACKGROUND

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The World Health Report 2010 on "Health Systems Financing: the path to universal health coverage (UHC)" is a seminal document outlining UHC as a global goal. UHC features strongly in Sustainable Development Goals (SDGs). The South African government plans for National Health Insurance (NHI) take up that goal for South Africa, like many other similar countries have done e.g. Brazil, Mexico, Thailand and Rwanda. Former WHO Director-General, Margaret Chan, advised that, in a time of both economic downturn and rising healthcare costs, countries should look for opportunities to improve efficiency. Ultimately any solution is home-grown, striking the right balance between population covered, range of services included and costs covered.[11,12] This is a never-ending mission as populations evolve, services expand and costs change.

Whilst there are ways to innovatively raise funds and reduce costs to the poor, equity and efficiency of the health service requires us to ensure that primary health care performs optimally. Primary health care (PHC), as expressed by the World Health Organisation, requires universal access, service delivery reform, public health alignment and government acting as custodian of all health provision in a country (including the private sector) to perform optimally. Service delivery reform of PHC in turn requires first contact care to become patient-, person- and people-centred to get the best outcomes.[13,14] The Joint Learning Network (JLN), a collaboration of developing countries pursuing UHC, and specifically capitation contracting, share six lessons from JLN countries on establishing UHC: stronger PHC is associated with: greater equity and access, higher patient satisfaction, lower costs and better outcomes. However, financing and payment reforms only often does not help strengthen PHC. Obstacles include hospital-centred approaches, poor referral systems and poor engagement with the private sector.[15]

National Treasury has commissioned the development of this Operational Manual to guide the details in contracting for Primary Care Services. There has been an extensive literature review to examine such contracts **(APPENDIX A).** International experiences could be divided into three settings: countries where public providers dominate, countries where there is a mix of public and private providers, and countries where the private sector is dominant. Their experience at implementing capitation payment systems differ.

There are experiences in countries with public providers only, like Brazil, Mexico, Costa Rica, Philippines, Chile, Vietnam and Turkey. There has been strong effectiveness in achieving rapid access like Brazil, Mexico and Turkey with decentralised units of care, team-based care, including doctors, improved funding, and training of providers in family medicine. However, these have been limited by poor integration, lack of coordination with the private sector and poor accountability. Pay-for-performance is a growing feature.

Experiences from countries with a mix of public and private providers show benefit. Thailand has inspired the idea of a Contracting Unit for Primary Care in the NHI Bill. Whilst it has improved access and care it is challenged by hospital inclusion in the initial contracting. South Africa also has a much larger private sector than Thailand and much poorer capacity in its public health service than Thailand to implement the model

exactly. Ghana has also engaged the private sector with its National Health Insurance Scheme (NHIS). This has improved infant mortality rates but there are challenges with the low rates of remuneration, shallow benefits and patient dissatisfaction. There are also challenges in the design and consequently cost management. There are other countries that have engaged the private sector with variable results: Kenya, Colombia, Georgia and Myanmar.

Eastern European countries have much more experience with private providers, after moving away from their historically public service organisation. Whilst there are considerable achievements in Estonia, Macedonia and Croatia there are still challenges with staff shortages, low quality of care, cost pressures and poor infrastructure (including information management). The United Kingdom has a historically strong system of capitation with general practitioners, as private sector providers. It is however challenged with referrals (especially with NHS hospitals as public-only providers) and poor population health management. There are pockets of innovation in the United States of America that provide insight into managing capitation models.

There are South African experiences with capitation contracting. Whilst there was an attempt at managed care in the 1990s there was never strong attempts at capitation directly with providers within the medical scheme environment. The strong deregulation of the 1990s led to dramatic cost increases, albeit somewhat contained by some re-regulation in the 2000s. The only attempt at capitation in South Africa (by private general practitioners (GPs) in Uitenhage-Despatch) failed because it took on too much risk, with capitation that included hospital care. The Boncap Option, under the Bonitas Medical Scheme, administered by Medscheme Medical Scheme Administrator, started with a mixed capitation system for ambulatory care in 2016 but is now functioning only with low fee-for-service, as the mixed capitation model was seen as a failing business model. Discovery's KeyCare Medical Scheme is the only known medical scheme that pays GPs a capitation fee directly as part of a mixed capitation model. GPs were paid a capitation fee of ±R50 per person per month (adjusted by age and gender) and then paid a fee e.g. of R135.50 per visit for a non-dispensing doctor, as of 2018. GPs are limited to a list of medicines, tests and x-rays.

South African evidence suggests that GPs are ambivalent about NHI but would be competitive in their pricing, and team-based in their approach, to a panel of 10 000 people. Key risks they perceive are: a lack of trust in government as payor; high utilisation rates by patients; and the challenge of larger practices, given current practice sizes. Their plans for mitigating these risks respectively were: GP leaders negotiating a strong contract; health promotion for high utilisation; and better management skills to manage a large team. A key question is how to shape the details of PHC contracting in South Africa to address these concerns and facilitate the right behaviours and outcomes.[18]

The international literature strongly advises a mixed capitation payment system, with capitation as the dominant element, fee-for-service (selectively) and payment for performance (large enough to be of consequence). There is no strong evidence for the optimal mix. It depends very much on context.[1–3]

The South African government is seeking to re-engineer PHC with National Health Insurance (NHI). As per the NHI Bill of 2018 NHI plans are for a single publicly owned and administered strategic purchaser (NHI Fund) to actively purchase PHC services on

behalf of the entire population from providers, based on the principle of separation of purchaser and provider. The NHI Fund will make capitation payments directly to public and private contracted providers, accredited using the Ideal Clinic model and National Quality Standards for Health. There will be legally-binding contracts entered into between the NHI Fund and providers. The NHI Fund will renew provider accreditation every five years, with the possibility of contract termination. Services provided by public-private providers should reflect the current public service range available. The NHI Bill, which sets up the structures of an NHI Fund, defines PHC services as services that include health promotion, disease prevention, curative, rehabilitative and palliative services (to be defined further by the NHI Service Benefits Committee). Users (as members of the population registered on the Health Patient Registry System (HPRS)) will be entitled to receive quality health service benefits from the contracted provider they have enrolled with, free of charge, within a reasonable time and with professional standards of care. A user will not be allowed to seek specialist or hospital services without a referral from their registered primary care provider. [16,17]

Enrolment by contracted providers will occur from the catchment area of a district in an 'internal market', with user choice enshrined. Users will be expected to register at an accredited public or private health establishment of their choice with an identity card. The health establishment will issue the user with a registration number and maintain a register of all enrolled users and their dependents using the Health Patient Registration System (HPRS). Information management will require an electronic platform, linked to the NHI Fund membership database. The contracted providers will be expected to submit information to the National Health Information Repository and Data System (NHIRDS), including details of treatment and investigation to allow assessment of performance and payment. Risk adjustment will be refined over time, including rural support. Payment-for-performance will be based on outcomes. Medicines, based on the Essential Drug Lists, may be accessible via nationally-agreed pharmaceutical contracts. The NHI may contract with accredited private laboratories for the Essential Laboratory List. Referrals will be managed using gatekeeping and referral management. Community-oriented primary care (COPC) is vital in comprehensively covering the contracted populations healthcare, especially preventively and as partners in addressing social determinants of health. The District Health Management Office (DHMO) established by the National Health Act will progressively remove itself from providing and managing personal health services. It will facilitate, coordinate and manage non-personal public care programmes at district level and report on efficient functioning of the overall health care services of the district. Coordination of services, especially priority programmes, will happen by the DHMO at a district level**.** The Contracting Unit for Primary Care (CUP), comprising district hospital, clinics and/or community health centres, ward-based outreach teams and private service providers organised in horizontal networks, will be the organisational unit for the payment of primary health care services in a specified geographical sub-district area. It will assist the NHI Fund identify health needs and providers, monitor contracts entered into with contracted provider, facilitate the integration of public and private providers and ensure that the referral system is functional.[16,17]

There is a strong need for integration of service as the contracting proceeds especially for higher levels of care. However this should be prioritised to be patient-, person- and people-centred rather than manager-centred. The NHI should contract with all providers on the basis of a defined population as an enrolment (rather than geography) and then ensure horizontal and vertical integration around the enrolled patient (including allied,

specialist and hospital services in integrated contracting for the enrolled population) as PHC contracting progresses in steps. This will allow more robust patient choices, service-contract configurations and alternative re-imbursement strategies to emerge within each health district as NHI contracting proceeds.

First contact care is defined as a clinic providing diagnosis, management, prevention and health promotion in the facility and in the community.[4] The public service package is currently defined in several, sometimes contradictory ways. There are Core Packages of Services for: Community-Based Services, Clinic-Based Services and District Hospital Services. It would be useful to describe non-hospital primary health care services in 3 parts for capitation contracting:

A. **CLINIC Ambulatory health care**, usually provided in clinics as consultations with medicines and tests. The service covers diagnosis, management, prevention and health promotion across facility and community. School health services, social welfare, ward-based outreach teams, health promoters and environmental health services are often linked to clinics.
B. **CHC's with shared and extended services**, usually provided in a community health centre (CHC). There is often a pharmacist, radiography service, after-hours care, 24hr emergency care and maternity obstetric unit as shared services for the catchment population of clinics surrounding it. A few CHCs have a minor procedure theatre and some short stay beds.
C. **LARGER CHC's with multidisciplinary allied health care**, includes dentistry, optometry, dietetics, physiotherapy, occupational therapy, speech and audiology,

The NHI laudably refers to accredited multidisciplinary group practices as a contracting framework. The current public service context suggests that this is still aspirational e.g. CHCs which have shared, extended and multidisciplinary services, or even doctors, are far from pervasive across the country. This challenge of multidisciplinary group practice also operates in the private sector with solo GPs the most pervasive form of organisation amongst the ±9000 GPs in South Africa, especially in townships and rural communities, with corporate group practices being very limited e.g. Medicross has only 400 GPs in total, and mostly in suburbs.

Any attempt at contracting must ensure strong accountability: if anything is paid for then it must be delivered, with reasonable evidence of care in the way of outcomes and impact. Another key challenge is to price multidisciplinary care effectively, and fairly if you expect it to be delivered. The current public service costs reflects mostly on clinic-level service delivery, with few full-time doctors, very basic teamwork and with several inefficiencies built in. The private sector also has very high costs for multidisciplinary care, a lack of task-shifting efficiencies evident and several inefficiencies built into its pricing, including being delinked from active population-based health promotion. There needs to be a progressive approach to expanding services that are expected to be universal in a sustainable manner and then accountably delivered universally across the country. This has to be premised on pilots producing service and cost data in a transformed environment.

There are important principles that should guide the design of an NHI capitation contract. Key lessons are to keep the process small and simple and achieve buy-in of providers with acceptable pricing. NHI is a move towards accountability of providers for a defined population that is capitated for service provision from the bottom up; NHI

contracting should be as comprehensive yet as simple as possible; and the principles of clinical accountability, managed competition and quality measurement should underline the contracting process. Community orientation and population management are key to address both upstream and downstream costs.

PROPOSED SERVICE DELIVERY PLATFORM

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A model for PHC contracting must include details of the contracting entities.[15] Decentralised units are often key to capitation models, having authority over decision-making and decentralised to the most effective level. An NHI user should ultimately and universally be entitled to a PHC service package covering ambulatory care by a team, including a doctor, (with consultations, medicines and tests), shared services (with X-rays and emergency care) and multidisciplinary team care (dentist, optometrist etc), and specialist and inpatient care in the health district at a higher level of quality than is currently the case. However, this requires a stepped approach as there are several elements involved, it can become complex and needs considerable buy-in. There should be a balance between market mechanisms and control-oversight, with quality measures and accountability creating managed competition in the health care system.

Community Practice

The first phase of contracting is to set up a **Community Practice as a basic unit of ambulatory primary health care**, which approximates the current clinic service but with the addition of a full-time doctor caring for a defined practice population (with consultations, medicines and tests (including X-rays) available). The design objective for the Community Practice to integrate primary health care professionals into a team that provides patient-, person- and people-centred care for a defined and manageable population per contracted community practice, a basic unit of primary health care. This should lay the basis for the next phase in contracting: where community practices can group together to provide shared and extended services, including progressively and accountably adding members of the multidisciplinary team, more cost-effectively in multidisciplinary groups where the larger population produces economies of scale for such professionals.

Community Practice Size

Countries in which public services are the main providers enrolment tends to be geographic with practices limited to 3000 to 4000 per doctor, considering the resources in the country and their objectives in terms of quality. These residents are limited in their choice.[19–22] In countries where private providers are the dominant mode, residents in a region are entitled to register with one provider from a selection of contracted providers. Practice sizes are smaller with the greater availability of doctors.[23] The latest White Paper speaks of a geographic distribution of enrolment. However, this may be difficult given the choice that patients currently experience, even in the public service.[16] This problem of a lack of choice has impacted UHC rollout in Turkey.[21] The resources of doctors available in South Africa makes a ratio of 1 doctor to 10 000 people a workable model, especially with the possibility of team-based care and task-shifting.[24] The issue of panel size is complex. A large panel size is associated with reduced access and reduced satisfaction. The context also influences panel sizes as it may need to be smaller in isolated rural areas. There are also ways to calculate the panel: using workloads, developing a target panel size (averaging out providers) or planning for needs of the population.[25]

The proposal is for the panel of a Community Practice to be 2000 at minimum and 10 000 at maximum. The minimum is premised on ensuring a comfort level for GPs to test contracts out with an expected 40 patients a day. Continuing 2000 as a minimum may confound the objective of universal health coverage, as only 20m people (mostly urban) will get good care by the current total of ±10 000 doctors who may enter the NHI system and the rest (mostly rural) will get even worse care than now. The minimum should be raised every two years by 1000 until it reaches a minimum of 6000 after eight years. The design objective in these is to provide a reasonable time for GPs entering into NHI contracts to adjust to the new paradigm of primary care, including getting larger premises and developing good teams with other health care workers: nurses and clinical associates. As larger practices take up most of the population in urban/suburban areas this increasing panel minimum is likely to encourage redistribution of doctors to areas of need over time e.g. rural areas.

The maximum of 10 000 in a Community Practice, with one accountable doctor is premised on ±6000 doctors covering the country, using a little more than half of the GPs available in South Africa. The design objective is to encourage greater efficiencies (given the shortage of doctors) and to also maintain overall clinical quality with a maximum number per doctor. The minimum and maximum in panel size should be decreased over time as more doctors are attracted to primary care and NHI contracting.

The Contracted Provider needs to indicate in the application and publicly what the planned panel size is going to be. Any change needs to be authorised to prevent adverse selection and discrimination. This panel size chosen has to be publicly visible. Any closure of the panel should be by written permission from the NHI Fund that is publicly visible to prevent adverse selection or discrimination.

Contracted Provider

The unit of contracting for many countries using the private sector is a solo private general practitioner but that is shifting towards contracting with primary care organisations, mostly to cater to after-hours services but also to help shift independent practitioners from a cottage industry to newer larger integrated models of care. The regulatory context often dictates the limits in legal entities able to contract.[26] Current public service clinic/s should be reorganised to contract with NHI. There are also Non-Profit Organisations (NPOs) that are currently providing services very effectively and have the capacity and legal ability to contract to provide services.

Those who can contract for Community Practices under NHI should be any clinic (in a legally acceptable format), Non-Profit Organisations (as legally allowed currently and including organisations with PHC Nurses in private franchises) and private general practitioner (GP) (as solo, partnerships, incorporated company or association as required by the Health Professions Council of South Africa (HPCSA)).[27] It should be advocated for the HPCSA to amend these rules to allow contracting by corporates, especially to cater to the next phase of contracting. All contracts should specify the accountable doctor, holding them individually and directly accountable to NHI for their enrolled population. A District Management Specialist Team (DMST) should support readiness of publicly-owned clinics. It should include a Public Health Medicine Specialist, experienced public service managers and managers with private experience. This team should be aligned with the District Clinical Specialist Team (DCST) in

supporting the development of publicly-owned clinics and other NHI PHC Contracted Providers.

Contracting Administrator

Most countries set up a national health insurance agency, which then contracts directly with providers. In South Africa the National Health Insurance Fund (NHIF) and Contracting Units for Primary Care (CUP) have not been set up yet and private general practitioners are wary of government as a partner in NHI PHC contracting as they don't trust the integrity of contract and payment.[18] Currently the state scheme, Government Employee Medical Scheme (GEMS) uses several private medical scheme administrators to administer it. It is very important that NHI is seen as competent to deal with contracted providers. The NHI Fund should have proper financial management oversight, risk management capacity, strict audit controls and management of payment services. There were serious challenges in Ghana with paper-based claims and poor review systems.[28,29]

Strategic administration should remain with the NHI Fund e.g. NHI marketing and communication to the public, analytics and accreditation. to allow coherence at a national level but the NHI Fund (and NDOH in the interim) should competitively tender a range of day-to-day non-strategic administration of contracts to Medical Scheme Administrators by provinces. The smallest province (Northern Cape) has 1.2 m million people and the largest (Gauteng) has 12.7 million people. Discovery (the largest scheme currently) has 3 million people. The design objective is to create a comparable and competitive market of variable size for scheme administrators such that the NHI Fund is not held ransom to administration function or size dominance in the future. The contract with administrators should encourage innovation and ensure competitors can be compared by the same outcome measures. This transformative model should encourage new entrants into a market of nine provinces and drive administration costs down over time, well below the GEMs achievement of 4-5% and the industry standard of 15%. Some administrators may contract for multiple provinces if they are competitive but the NHI Fund must discourage dominance by avoiding more than 33% of the market going to one administrator.

The appointed NHI administrators in each province should accredit, contract and manage Contracted Providers using the standardised contract prepared by the NHI Fund. The operations of appointed NHI administrators in each province should be guided by this Operational Manual and reviewed in a national forum of NHI administrators. All NHI administrators in each province should seamlessly connect to others.

Funds should flow from National Treasury to the NHI Fund (as described in the NHI Bill), and from there directly to the Contracted Provider, as per validated claims administered by contracted Administrators, similar to operations of current medical schemes. All financial and governance regulatory controls should apply. However the NHI Bill needs to be reconciled with the Public Finance Management Act, because NHI Fund monies need to be pre-paid with capitation to reduce cashflow problems and managed proactively to ensure prompt payment of Contracted Providers.

Interaction with Medical Schemes

The NHI Community Practice network, as a starting point for the Comprehensive Prescribed Minimum Benefit Package of Primary Health Care, should be offered to medical schemes to implement as an option. It should prevent patients from being forced to pay for primary health care if they are happy with NHI PHC services. Medical schemes articulation with the NHI Community Practice network, with complementary top-up cover for allied, hospital and specialist cover, would internalise NHI PHC services to current medical schemes and enable a more transitionary approach to more appropriate care for populations currently covered by medical aids, as trust improves.

PHC SERVICE PACKAGE

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A model for primary health care contracting must include details of the PHC benefits or service package. Countries should first determine their objectives for PHC service delivery and then identify financing and payment models that will support that vision and create the right incentives to ensure seamless, well-managed access across levels of care. Medicines, laboratory investigations and x-rays are often part of the member service package but a contract with primary providers might include providing none or some of these elements. After-hours service has also been a contention, with many GPs not providing these services. This has been the focus of reform in many developed countries with GPs now expected to provide after-hours services as a cooperative and as part of the basic care package. This is found globally necessary as there is considerable use of emergency departments for ambulatory care after-hours.[26,30]

The White Paper of 2017 expects the NHI service package to start with what is available in the public service currently as a departure point.[16] Government has described the public service package extensively in developing the District Health Services. These have been spelt out as community-based services, clinic-based services and district hospital-based services.

Community-based services cover community-level water and sanitation using an environmental health officers, community-level home-based care, directly-observed treatment strategy, integrated nutrition programme, school health and community-based rehabilitation using community-health workers.[4]

The clinic norms and standards (including community health centres) indicate infrastructure and equipment needs, and cover the following services: women's reproductive health, oral health, mental health, victims of sexual abuse, domestic violence and gender violence, substance abuse, chronic disease and geriatrics, diabetes, hypertension, rehabilitation services, sexually transmitted diseases, HIV/AIDS, malaria, rabies, tuberculosis, leprosy, prevention of impairment hearing due to otitis media, rheumatic fever and rheumatic heart disease, trauma and emergency, management and prevention of genetic disorders and birth defects, integrated management of childhood illnesses, asthma, diseases prevented by immunisation, adolescent and youth health, management of communicable diseases, cholera and diarrheal disease, dysentery, and helminths.[4]

The district hospital service package covers core norms and standards, women's health, childhood illness, trauma and emergency, surgical services, oral health, adult medical services, mental health, rehabilitation and pharmaceutical services.[31] Unfortunately, whilst these are norms many public health facilities in South Africa do not strictly adhere to these required services.

The Essential Drugs Lists and Standard Treatment Guidelines further inform this by clarifying the national drugs advised and thresholds for referral. There are also norms and standards that have been elaborated in the subsequent national Primary Care 101 Guidelines.[32] Unfortunately, these sometimes conflict with the Essential Drugs Lists and Standard Treatment Guidelines. An audit of guidelines in South Africa show a number of national government guidelines available but also gaps. There are non-government

guidelines that are seen as important to clinicians and guide their behaviour e.g. SA Medical Association and Society Guidelines.[33] Experts in this space advise that South African guidelines are fragmented and inconsistent. They advise a three-tiered model to manage guidelines in South Africa: Tier 1 involves transparent synthesis of existing high quality clinical practice guidelines, Tier 2 reflects local expertise (reviewing Tier 1 evidence) and Tier 3 comprises tailored end-user guidance (similar to the STG-EDL and PC101).[34]

Family physicians have been doing work on the competencies that a family doctor ought to have under the circumstances of National Health Insurance (NHI). They suggest that this accountable doctor be trained in a two-year part-time diploma. Family doctors are expected to use family medicine theory and apply it in practice in six roles appropriate to ambulatory care of a clinic or general practice under NHI in South Africa: as a competent clinician, a change agent, a capability builder, a critical thinker, a community advocate and a collaborator. Family physicians have delineated the kinds of procedures that a family physician (and in many instances a family doctor) should be capable of, given appropriate training.[35–37]

Experience in Ghana and Kenya suggest that too shallow a service package commensurate with a low capitation fee can become a challenge to the take up of a package by GPs. [28,29,38]

Proposed Ambulatory Service Package

The service package for a Community Practice should cover ambulatory care commonly and easily available in standalone clinics / practices. The user should be entitled to as many visits as needed. The service should cover diagnosis, management, prevention and health promotion across facility and community (using practice-employed community health workers) for:

- Acute care and minor ailments
- Communicable diseases (HIV-TB etc.)
- Non-communicable diseases (DM, HT etc.)
- Maternal and Child Health,
- Mental Health for Primary Care
- Palliative Care for Primary Care

This should specifically be guided by the PHC elements of the 285 Guidelines in South Africa, including all National Department of Health Guidelines . These are attached to the contract as the **NHI PHC CONTRACT RULES: SERVICE PACKAGE** and should be reviewed annually.

A list of preventive services should be paid for separately on a fee-for-service basis. This is to incentivise preventive services that need utilisation e.g. family planning, immunisation, Pap Smears, antenatal and postnatal care. The details are captured in the **NHI PHC CONTRACT RULES: PREVENTIVE SERVICES**, attached to the contract and should be reviewed annually. Contracted Providers should also be expected to support referrals from non-accredited public clinics using fee-for-service payment, based on pre-authorisation obtained by the clinic from the NHI. The details of this are in the **NHI PHC CONTRACT RULES: PAYMENTS**, attached to the contract and should be reviewed annually.

A list of office-based procedures should be paid for separately on a fee-for-service basis. The details of this are in the **NHI PHC CONTRACT RULES: PROCEDURES** attached to the contract and should be reviewed annually. The service to Users should cover a list of medicines and laboratory investigations that is sufficient for doctors to function in the Community Practice but restricted to support rational use. Draft lists are attached but need further discussion. The details of this are in the **NHI PHC CONTRACT RULES: MEDICINES** and **NHI PHC CONTRACT RULES: INVESTIGATIONS**, attached to the contract and should be reviewed annually. These should be paid on the basis of individual items claimed, including a separate dispensing fee to allow engagement by non-dispensing doctors. The details of this are captured in the **NHI PHC CONTRACT RULES: PAYMENTS**, attached to the contract and should be reviewed annually.

The service package should be aligned progressively with the Service Benefit Framework being developed by the Clinton Health Access Initiative (CHAI). A statutory body should be formed, linked to the Ministerial Advisory Committee on Health Care Benefits for NHI, similar to the respected National Institute of Clinical Excellence (NICE) in the United Kingdom to develop standardized South African guidelines, using the framework suggested by Machingaidze S 2018 (**APPENDIX B**). The service package boundaries should be refined as contracting evolves year-by-year, with supervised peer review by doctors from Contracted Providers, revised performance outcome measures and national negotiation, including representatives of Contracted Providers.

Contracted providers should be expected to provide all services for a minimum of 40 hours per week, during hours to be determined after consultation with enrolled members. The actual hours of opening should be publicly visible. Contracted Providers should be encouraged to use this as a competitive edge in satisfying the community's needs.

There are a number of issues that can determine the granularity in service package: practice accreditation, panel size, payment model and pricing, community-orientation, referrals and training. Details of the service package are in the **NHI PHC CONTRACT RULES: SERVICE PACKAGE,** attached to the contract and should be reviewed annually.

ORGANISING PRINCIPLES FOR PLATFORM

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Community-Oriented Primary Care

The South African government has implemented the PHC Re-engineering Guidelines as part of NHI implementation. This seeks to improve population-based care with a focus on prevention and home-based care using community healthcare workers (CHWs) in Ward-Based Outreach Teams.[39] This has been patchy in implementation but represents an important outcome for improved primary health care, considering social determinants of disease and health literacy levels in South Africa. The original development of community-oriented primary care (COPC) by the Karks in Pholela offers a more robust approach: getting profiles of every individual in the population served, strong community stakeholder engagement, practice re-orientation to the community and targeted health promotion.[39,40] This approach to population management is being embraced in many countries, not just Cuba and Brazil but developed countries as well e.g. New Zealand, Canada and the USA.[41] The need for effective community-based activities was found important in a Myanmar pilot.[42] Population management has been found needed in the UK as well.[23]

The current culture of private general practitioners and clinics is a curative approach. The NHI must quickly engender a population-based preventive approach. Contracted providers should actively manage their practice population with Community-Oriented Primary Care (COPC) and PHC re-engineering principles, according to national guidelines, policies and best practice in South Africa.

Contracted providers should develop a community profile with data on the full practice population (using community health workers where possible as part of their employed team), state resources, community inputs and practice data, and then act on this with clear plans for prevention at all levels. The details of this are captured in the **NHI PHC CONTRACT RULES: COPC**, attached to the contract and should be reviewed annually.

The contracted provider should engage their practice community in an annual open day-priority setting workshop to set community priorities. The contracted provider should establish and maintain a Community Forum comprising members of the committee elected annually from within the contracted providers panel of members. The contracted provider should engage at such frequent intervals as the contracted provider must agree with the Forum. The purpose should be to obtain the views of users who attend the service, review any feedback of services, to plan improvements to the service and plan health promotion initiatives in the community

The procurement process of contracted providers should empower the practice population. There should be simple practice leaflet for users and a more detailed annual review of the practice every 12 months that is published on the practice website and submitted to the NHI. NHI Users should not be separated from non-NHI Users nor discriminated against in any way, except by virtue of the limits of the NHI PHC Service Package.

There should be no out-of-pocket costs or split-billing imposed on the NHI patient for services contained within the PHC Service Package. The contracted provider should establish and operate a complaints procedure. Any patient attending with no appointment should be attended to by an appropriate health care professional.

Contracted Providers should ensure that the length of booked appointments and of walk-in consultations are adherent to time standards as a separate referenced document that includes Batho Pele Principles. The details of this are in the **NHI PHC CONTRACT RULES: SERVICE STANDARDS**, attached to the contract and should be reviewed annually.

Clinical Teamwork and Personnel standards

The Community Practice model must include nurses and clinical associates in task-shifting to be cost-effective. Organisational and institutional factors are needed to optimize human resources in health. Skills management (with task-shifting) involves skill development (role enhancement and role enlargement) and skill flexibility (role substitution and role delegation).[43] The Workload Indicators of Staffing Need (WISN) methodology by World Health Organisation has been helpful in developing staffing norms; ensuring appropriate skills mix and estimating workforce requirements for new cadres.[44–46]

Minimum clinical personnel standards should be set at one full-time accountable doctor per 10 000 people to lead the team (using the World Health Organisation unit of measure for doctors per population), one full-time nurse per 2000 people and one full-time clinical associate per 5000 people, as an active part of the team providing care directly to the practice population. This cost should be included in the capitation fee. However a payment additional to the capitation fee should be provided to Community Practices for appointing community health workers (CHWs) (at one CHW per 1000 people). All personnel employed should be registered with the NHI Administrator on a national database and should be explicitly named in all claims / encounters to enable national review and planning. The design objective is monitor, encourage and reward a team-based approach by the contracted providers, embracing doctors, nurses, clinical associates and CHWs in supervised clinical task-shifting.

The contracted provider has a duty to educate and train all personnel, so added qualifications and continuous professional development of the team will be reviewed five-yearly as part of the accreditation and should be progressively included in metrics for performance management. The details of this are in the **NHI PHC CONTRACT RULES: PERSONNEL STANDARDS,** attached to the contract and reviewed annually.

Service Innovation (for additional services in the future)

Community Practices should be entitled to contract for their population (including as groups) to provide for or subcontract additional services in a separate layer of contracting at a future date, dependent on more precise service and cost data being obtained in this first phase of contracting:

Enhanced PHC Team: There could be a bonus to the capitation fee later to allow enhanced PHC team-based care (with at least two case managers, one health promoters, one pharmacy assistant, one psychologist, one social worker, one dietician and one bio kineticist per registered with NHI by the Community Practice per 10 000 population). Outcomes can be measured with online public publication of minuted meetings of the team, an annual report, including health promotion programmes specifically addressing priority health programmes, as well as performance

management. The design objective would be to incentivise transformation of contracted providers to address preventive care, and build capacity up for additional contracting, including specialist care, hospital referral saving and hospital commissioning that may reduce downstream costs.

Emergency Care Services: this should be considered in the future as there may be serious limitations for these to be provided effectively and accountably in the initial contracting. Contracted providers should be expected to provide 24-hour emergency services locally for their enrolled population as part of the capitated service package, whether they contract it privately from other private healthcare providers, provide it as a group of GPs/FPs/Clinics/NPOs or work for 16-20 hours per week as part of the nearest public 24-hour emergency service (where there are no other GPs/FPs/Clinics/NPOs to form a group nor other private healthcare providers that can be contracted). The design objective is to address the serious risk of moral hazard where contracted providers shift their ambulatory burden of service to 24-hour emergency services provided by others. 24-hour emergency services should not be further away from the practice than the nearest public 24-hour emergency services unless exceptions are agreed to with NHI administrators. The location, radius and times of emergency services in relation to contracted providers should be subject to negotiation and reviewed annually The design objective is to reduce the risk of lowered access, where contracted providers create difficulty for patients to access emergency services. The elements of patient access to 24-hour emergency care, and after-hours care, should be monitored and evaluated as Community Practice contracting proceeds.

MOU services: this should be a separately costed item allowing Community Practices to purchase care for their patients in future. There is data currently available in the private sector but some more costing data may be required to allow this, as private costs are high and contracted providers may be averse to the risk associated with this. The grounding of these services within the Community Practice would enable a more preventive community-based approach to mother and child health.

Dentistry/Optometry: these should be a separately costed item allowing Community Practices to purchase care for their patients in future. There is data currently available in the private sector to allow this soon but is very costly given private sector models of care. However, the grounding of these services within the Community Practice would enable a more preventive community-based approach to oral and optometric health and may allow a different cost structure to emerge.

Allied Health Care: these should be a separately costed item allowing Community Practices to purchase care for their patients in future. There is no data currently available in the private sector to allow this soon but appears very costly given private sector models of care. The grounding of these services within the Community Practice would enable a more preventive community-based approach to allied health care and may allow a different cost structure to emerge.

Specialist Care: these should be a separately costed item allowing Community Practices to purchase specialist care for their patients in future. There is data currently available in the private sector to allow this soon but is very costly given private sector models of care. However, the grounding of these services within the Community Practice would enable a more preventive community-based approach to specialist care and may allow a different cost structure to emerge.

Hospital Referral Saving: this should be a separately costed item allowing Community Practices to share in savings of referrals for their patients in future whilst maintaining quality outcomes. There is no data currently available in the private sector to allow this soon but appears very costly given private sector models of care. A payment model of a 20% share in savings of referral costs, linked simplistically to patient-day expenditure or average length of stay at the public hospital can incentivise contracted primary care providers to reduce ambulatory-care sensitive hospitalisations and improve community-based services with case management. The NHI Referral Points should submit data to the NHI to allow this to be part of referral management and to cost the expansion of the full NHI Service Package.

Hospital Commissioning: this should be a separately costed item allowing Community Practices to purchase inpatient hospital care for their patients in future whilst maintaining quality outcomes. There is no data currently available in the public and private sector to allow this soon. The NHI Referral Network should submit data to the NHI to cost the expansion of the full NHI Service Package.

Gap Contracts: this should be considered in the future where access may be limited due either to small numbers of patients e.g. suburbs or widely dispersed users e.g. rural farm areas. There is no data currently available to allow this soon.

Coordination and Monitoring by District Health Services

Developing space for service innovation should be coordinated and integrated at a district level. The District Health Management Office (DHMO) should create a Forum for coordination and integration of all service providers (accredited public and private providers as well as non-accredited non-contracted public and private providers). Each Community Practice should designate a representative to be part of such a Forum and liaise with the District Health Office. The District Health Office should also ensure that delivery of programmatic priorities of the Department of Health by Community Practices are supported, monitored and evaluated. The Forum should ensure that coverage is evaluated regularly and that gaps are identified and filled with further contracting by the NHI Fund. The details of this are in the **NHI PHC CONTRACT RULES: DHMO COORDINATION,** attached to the contract and should be reviewed annually.

OPERATIONAL REQUIREMENTS

CONTENTS

Accreditation

The White Paper expects Ideal Clinic norms and standards to be implemented.[16] Ideal Clinic norms and standards cover 207 elements within the ten components of administration, integrated clinical service management, medicines, supplies, and laboratory services, human resources for health, support services, infrastructure, health information management, communications, district health system support and implementing partners and stakeholders. The Office of Health Standards Compliance (OHSC) has modified this to develop standards for private general practitioners. The final details of this are in the **NHI PHC CONTRACT RULES: ACCREDITATION**, attached to the contract and should be reviewed annually. The OHSC GP standards are still being processed by the Minister of Health, but may be used in the feasibility testing. Contracted providers should be expected to fill in an Accreditation Checklist and Application Form and submit these to the NHI administrators for approval.

Application should include providing ID, proof of university qualifications, Health Professions Council of South Africa registration, medical liability cover and Board of Healthcare Funders Practice Number. An annex of the current and/or planned accountable doctor should be attached to the application. The processing of applications should be within 30 days, not unreasonably withheld and should be justified in writing if refused.

The OHSC has inspection capacity challenges currently. However, accreditation can begin quickly and at scale by getting potential contracted providers to do a self-assessment and submit the application for speedy approval by the NHI Administrator. The OHSC (or independent providers contracted for this task e.g. COHSASA) should then do random audit inspections 1.25 times per 5 year cycle on all Contracted Providers. The details of this audit process are in the **NHI PHC CONTRACT RULES: AUDIT**, attached to the contract and should be reviewed annually.

Population Enrolment

All users in a district (eligible as per NHI Bill and captured on the Health Patient Registry System (HPRS)) should be informed by the NHI administrators of a list of accredited Contracted Providers (whether accredited Clinic or GP/FP) and asked to make their own choice. Users should be told to approach their contracted provider of choice with their ID and enrol / register them on the HPRS in the Contracted Providers rooms. Enrolment of the population can be a challenge. In Myanmar the enrolment was supported with an initial screening offered to induce enrolment. However, there was difficulty involving the community, there was incomplete information even with registrations door-to-door, there was a short screening period and long distances and high travel costs involved.[47] It is vital to inform users (and media) so that users can make their choices, understanding what is available.[48] There may be an administrative 'allocation' of users in the local area to contracted providers by providing contact lists to contracted providers to support their enrolment of users. Automatic enrolments risks allowing contracted providers getting paid without users knowing of this and not using the service as expected, given the literacy challenges in South Africa. Users should only

be deemed enrolled, and thus the contracted provider paid the capitation fee, when the contracted provider fully registers the user into their practice using the HPRS. contracted providers should be encouraged to enrol / register users from within the district, including their current patients and their families. The District Health Management Office should support contracted providers to educate the population on their rights and benefits. This could be supported with a well-publicised national period of enrolment. The design objective is to empower users to make their own choice.

Enrolment needs to include inviting newly registered patient within six months to consult for as 'Comprehensive Health Checks', especially vulnerable users and should encourage inviting all users to consult every five years. This should be paid on a fee-for-service basis to incentivise Comprehensive Health Checks as an exercise of enrolment education, risk assessment and medium to long term health care planning. The percentage of non-participating users having five-yearly 'Comprehensive Health Checks' should be incorporated into the performance management system. The design objective is to incentivise full population enrolment and subsequent preventive care.

Users can change their contracted provider annually by going to another contracted provider and filling in the form to change automatically. There may be a policy decision to allow six-monthly changes for the first twenty four months and thereafter annually.

There is the challenge in South Africa of high rates of local migrancy between districts and even provinces, sometimes even daily between home and work. In Ontario patients are allowed to seek another GP despite their chosen designated GP, due to school or work convenience issues, although they are limited to their own GP referring them further. This has had the impact that it is costly for the designated GP (as the cost of that visit accrues to them) and fragments the service.[49] Some medical schemes in South Africa give their beneficiaries the option of choosing a second contracted provider and then deciding who will be their primary contracted provider (who they will use mostly, who will receive the capitation fee and who will be their gatekeeper to referrals) and who will be their secondary contracted provider to use not more than two times a year paid on a fee-for-service basis e.g. due to work or school challenges). It was suggested that a letter of motivation by the user to the NHI administrator for a secondary contracted provider could be allowed. Out-of-province visits should be allowed on a fee-for-service basis considering emergencies on rural home visits, limited to two visits per annum and pre-authorisation from NHI. These were considered very complicated. The simplest solution was to leave the primary contracted provider to allow this, based on patient needs and responsiveness to patients.

A key concern was whether enrolment rules would allow the perversity of separate practice that some GPs may engage in to control the impact of the capitated model on their current practices, akin to the district surgeon practices of the apartheid past. Closures of panels should be managed as in the United Kingdom.[24,50] Patients in Ghana as well as in the pilot in Myanmar showed patients being dissatisfied with quality as doctors would discriminate between enrolled and un-enrolled members, giving un-enrolled patient preference and better treatment because there was a fee-for-service remuneration.[28,29,42] Panel sizes changes and premature closures of enrolment should be formally authorised by application to the NHI Fund and visible to all patients**.** The details of this are in the **NHI PHC CONTRACT RULES: ENROLMENT**, attached to the contract and should be reviewed annually.

Enrolment in the feasibility stage may be targeted on a full sub-population in a pilot district/s however the feasibility needs to tested in 1-2 areas that are representative of South African diversity, including urban-rural divides. Funding in 2019/2020 allows for ±100 000 lives to be covered and ±25 Contracted Providers to be contracted. The rollout of the contracting from 2019/2020 could also be phased by districts or province to ensure requisite capacity is in place to support the process, especially public-owned clinics and NHI Referral Networks.

Data Management

Contracted providers should have online access to the Health Patient Registry System (HPRS) to register users in their facilities and to ensure users are not enrolled elsewhere. The NHI administrator should have online access to the HPRS to enable reconciliation of claims by contracted providers

There should be a mandatory Electronic Health Record (EHR) that has access to the HPRS and accredited for interoperability (with minimum standard variables and IT interoperability) that feeds into a national information exchange that is shared between all NHI Administrators contracted across South Africa. The design objective is that considerable dependence on capitation without the requisite clinical data will not allow the NHI administrator to monitor and pay for performance, as well as allow care coordination across the spectrum, given patient movement.

There are some EHRs available in the market in South Africa, including the National Department of Health's work on E-Prescribing (with treatment guidelines, lab data available and linked to the chronic care medicines dispensing and distribution project (CCMDD)). However, their adequacy and interoperability with a national information exchange is not clear. Hence there is a need to gather software vendors and medical scheme administrators to explore adequacy and interoperability issues. The software accreditation requirement should also include being able to view results from the National Health Laboratory Services

In the feasibility testing stage the appointed administrator should collect information using Practice Management Systems obtaining e.g. consultations, ICD10 codes etc. that still allow a considerable understanding of the clinical interactions to manage performance. A Health Information Exchange (HIE) may not be necessary at feasibility testing if just one NHI Administrator is appointed and enables all the EHR data from Contracted Providers to be assimilated. The HIE and interoperability will become an urgent necessity when the NHI contracting goes to scale across the country. The development of the HIE needs to be fast-tracked as software development does take time and most software houses are not aware nor involved in this process.

Mobile Health for community health care workers (CHWs) should be used by all contracted providers together with their EHRs. . Community Practices need to collect data on their entire enrolled population, not just patients. This is vital to get COPC off the ground and is cost-effective. The design objective for mobile health is to allow strong population health management. Data collected by CHWs and EHRs should include the users municipal ward. The design objective is to allow a resident to change their contracted providers and/or doctor-led team and/or CHW and still be assimilated at a Ward and Sub-District level for district managers to analyse and report granularity to stakeholders in the Sub-District / District.

The details of this are in the **NHI PHC CONTRACT RULES: DATA MANAGEMENT**, attached to the contract and should be reviewed annually.

Referrals

NHI-Contracted Providers should refer all their users for specialist, hospital and allied health care to a designated NHI Referral Network (set up by the NHI with the support of a simple office with a clerk and nurse at 1-2 local public hospitals, with an NHI-appointed family physician per district coordinating referrals with a network of specialists, starting within the public service).

Doctors should be able to consult with specialists linked to the NHI Referral Network using the free Vula software. NHI Contracted Providers should obtain emergency medical services using a dedicated line for NHI Users. This can expand after a year of data and cost estimates to allow the private sector to be brought in. This should be until the next phase of contracting allows Community Practices to group together and buy specialist and hospital services that integrates care for their defined population of a group of Community Practices. Alternative reimbursement models can be explored.

The details of this are captured in the **NHI PHC CONTRACT RULES: REFERRAL MANAGEMENT**, attached to the contract and should be reviewed annually.

Investments in Quality

The Primary Care Performance Initiative (PHCPI) identifies foundational characteristics of strong primary health care.[15] These are first contact care being comprehensive, collaborative and continuous in addressing patient-, person-, and people needs.[51] A payment system change involves major behavioural, organisation and financial challenges to participant. Change should be phased-in to allow time for changes to occur to practice culture, care delivery and information systems.[8] The entry requirement of postgraduate 'vocational' training of GPs has been a key factor influencing the quality of primary care with payment reform in the UK, Australia and Netherlands. In Australia those doctors who completed vocational training were eligible for higher rates of payment and resulted in the highest accreditation success between these countries. This not only improved the quality of primary care but also improved the status of general practice. General practice is now recognised in these countries as a medical specialty.[26] Vocational training has been taken up by many East European countries in their primary health care reforms. In Croatia all practicing GPs are expected to specialise in family medicine by 2015. Estonia made family medicine central to its reform in 1993.[52,53] South African family medicine departments are prepared to train family doctors in a two-year work-based online Diploma in Family Medicine [37] and can scale quite quickly to numbers achieved in Thailand. However, this would be pointless if, as in Thailand, there was no drive to do the Diploma.[54] The course learning outcomes for family doctors are very comprehensive and are closely allied to the performance outcomes of this contract.

Registering for the Diploma in Family Medicine should be a requirement for all NHI contracted doctors with less than 15 years of experience. This should be waived for those already in possession of a Fellowship or Masters in Family Medicine. All doctors should receive a refund of fees on completion of the Diploma. The Diploma will help doctors improve their clinical quality, help them embrace this new paradigm of practice

and help them enter the global specialty of family doctors with postgraduate training over the long term. The role of the doctor as a competent clinician will be enhanced and expanded to include roles as community advocate, change agent, collaborator, capacity builder, and critical thinker. Family physicians jointly-appointed by NHI to Universities at sub-district level can aid the training of these doctors and their compliance with standards. Completion of the Diploma (or possession of Fellowship or Masters in Family Medicine) should add 25% to the payment for performance to induce completion. This can be revised in 5-10 years. It can also be used to measure if there is a difference in outcomes, using other measures.

Peer review is a strong feature of family medicine training.[55] Experience in Ghana showed that there can be perverse incentives to refer to hospitals with little focus on high-spending patients or prevention as well as use of costly medicines.[28,29] All doctors from contracted providers should be part of a local, accredited and supervised peer review group in the NHI Referral Network, led by the NHI-appointed family physician. NHI Referral Networks should progressively support the process of private specialist and private hospital commissioning by contracted providers. Peer review history should be considered for further opportunities in PHC Commissioning.

The details of quality management are captured in the **NHI PHC CONTRACT RULES: QUALITY MANAGEMENT**, attached to the contract and should be reviewed annually.

FINANCIAL MODELLING AND COSTING

CONTENTS

Payment structure

Fee-for service is known to increase utilisation.[56] There is rich detail on abuse of fee-for service systems.[57] Fee-for service remains the predominant payment model in places like Canada, Australia, USA and in South Africa. This can encourage overprovision and lower incentive to provide quality.[58] Fee-for-service does not reward the large amounts of non-service work common in primary care. It often leads to burnout of doctors in primary care.[59]

While there is no ideal payment method and each model has its strengths and weaknesses, many countries are moving toward some variation of capitation payment for primary care. Capitation is structured around financing all necessary health care for a defined population rather than tying payment to specific diagnostic and curative services when those services are delivered. Among all of the payment methods capitation is the most consistent with the philosophy of primary care. In general, countries are moving toward capitation because the alternatives of fee-for-service and line-item budgets have demonstrated shortcomings in supporting a PHC-centered health system. Capitation also ensures accountability, financial stability-flexibility for providers, allows population choice, and includes population health status information. It can result in lower hospitalization, increased preventive care, better cost management, and a responsive service. Most countries start with simple capitation which is easy to administer. However, capitation can lead to unintended consequences.[15] It can lead to limited choice, stinting on care, cream-skimming (avoiding the sickly patient) with selective enrolments and over-referrals to specialists. There is little transparency to the clinicians' work.[5,58]

Systematic reviews recommend that a mixed capitation system, as a combination of capitation, fee-for-service and performance payment, works best. Chaix-Courturier (2000) suggest that fee-for-service is needed for populations that need more services whereas capitation reduces over-servicing.[3] The Organisation of Economic Cooperation and Development (OECD) suggests the same with simultaneous use of capitation, reduced fee-for-service and pay-for-performance.[7,60] The evidence suggests that blended payment models may have advantages but that there is no evidence to identify the appropriate mix of payment schemes. Other factors can influence physician behaviour, such as professional norms, patient related factors and market and institutional characteristics.[61] Disclosure of incentives to the public is important. It is also important to make the incentives simple, direct and transparent. Quality of data is an issue.[3] There is a reluctance by GPs to give up fee-for service. There is a need to overcome distrust, and phase in capitation with progressive adjustments.[8] One can mitigate weaknesses by adjustment and assessing quality and access with encounter data.[5] Competition is seen as an important factor to enhance efficiency and cost containment.[62]

There is considerable experimentation going on in the United States with the Accountable Care Act, encouraging Medicare to support innovations by Accountable Care Organisations. The Comprehensive Primary Care Plus Programme has developed a programme with different capitation, fee-for-service and pay-for-performance

mixes.[63,64] This is also being experimented with in Canada. Whilst Ontario uses stronger capitation, a blended option (with 45% fee-for-service) is becoming quite popular across other states in Canada. It needs appropriate regulatory oversight and tracking of referrals and medicines.[9] Reducing fee-for-service below marginal cost makes it efficient. Shadow billing of services (usually charged a fee) can allow data to still flow.[65] Microsimulation modelling with data from 969 USA practices showed that substitution of doctor visits with team and non-visit-based services for low complexity patients produced financial gains under capitation if more than 63% of the annual payments were capitated. The ratio of capitation vs. fee-for-service has to be high.[66] Several authors recommend that at least 70% of total payment needs to come from capitation.[67]

Estonia combines a fixed monthly infrastructure allowance, an age-adjusted capitation payment, some fee-for-service payments, payments based on distance to nearest hospital and a Quality Bonus System (using three performance domains: prevention, chronic disease management and quality improvement) with annual stepwise adjustments.[15] The pilot in Myanmar had a narrowly focused service package, including basic medication and diagnostics. The opening offer was a capitation fee based on the local cost of a consultation multiplied by the expected visit rate per year. Providers were given performance-based incentives to counter the perversities of capitation. They were allowed a co-payment of 10-20% as "fee-for-service" to reduce their fears of over-utilisation, even though this fear of over-utilisation proved unfounded in subsequent evaluations.[42,68,69]

Axene (2016) provided key success factors in re-imbursement: simple administration, adequate but not excessive payment, being consistent with resources, reflecting population risk, being consistent with other payors, in synchrony with medical management, clinically acceptable, allowing pay-for-performance, influencing provider behavior and having long term viability. It is a framework for negotiations.[10] Berenson (2010) pointed out additional issues with payment models: it should withstand legal challenge, it should not overexpose to risk, it should not create perverse response and it should be cheap to administer for both funder and provider.[7] Information on the cost of delivering health services is one important element of sound decision-making on establishing or expanding a PHC service package, strategically purchasing covered services, and implementing policies that will promote efficient service delivery and cost-effective services. But costing alone is not enough and must be combined with other information, such as the amount of available resources and policy priorities. Costing is usually balanced between historical budgets and negotiations.[15]

A Community Practice contract is proposed as a mixed capitation payment system, with capitation at its core, fee-for-service for specific situations and payment-for-performance underlining it's value-based approach. The dispensing fee should be excluded from the capitation payment. Price tables for fees-for-service should be an addendum to the contract and negotiated annually in the formal negotiating body set up between the NHI Fund and elected representatives of Contracted Providers.

It is inappropriate to use capitation for referrals from nurses in non-NHI clinics to NHI-contracted GPs, as 'specialists' referred to don't control the referral pattern or demand unless there is very strong teamwork. Fee-for-service is preferred for these circumstances.[10] Contracted Providers may support non-accredited public services (current clinics) by seeing referred patients on a fee-for-service basis. The risks of over-utilisation requires that these referrals be pre-authorised by the referring clinic and/or

NHIF to ensure accountability for costs. This should be paid for by the current Department of Health from its current budget so as not to prejudice NHI expenditure.

Payment of capitation fees should be monthly in advance by the NHI Administrator. The capitation payment may be seasonally varied by month (with a variation of between 70% to 120% of the monthly average after one year of payment) by a request attached to the Contact, with no more than 50% paid by mid-year. Contracted Providers should separately bill the NHI Administrator for medicines dispensed (including dispensing fee) and procedures using practice management software and electronic data interchange to settle claims. Payments of fee-for-service claims should be settled by the NHI Administrator within 30 days. Payments for performance should be paid by NHI Administrator quarterly within 3 months of the beginning of the financial year based on the payment for performance system agreed. Interest on late payments at prime plus one shall accrue on overdue payments. Parties should be liable to legal action and penalties on non-payment.

Payment should be into the bank account of the Contracted Provider as stipulated in the contract. There should be stipulations in the contract of how to address payment problems and resolution times/process, interest, double-billing, recovery of money claimed, NHI set offs, payment rate increases, claims more than three months old etc. The Health Ombudsman should be able to mediate in any disputes. All claims and encounter data should include the registered clinical staff in the practice providing the service. Utilisation data should be provided by the administrator to NHI Referral Networks and examined and critiqued in a peer-review process. The details of payment system and issues are captured in the **NHI PHC CONTRACT RULES: PAYMENT**, attached to the contract and should be reviewed annually. All NHI PHC Contract rules should be signed by representatives of both NHI Fund and Providers, and gazetted formally.

Risk Adjustments

Capitation needs adjustment.[7] Adjustments are needed for health need's, geography and poverty.[15] Age and gender are often used but the practice effects are small. The relationship of primary care costs to morbidity is of interest for capitation fee adjustment and horizontal equity. The best performing multi-morbidity measures are simple counts of chronic conditions the patients suffers from. Correlation to costs was five times more with simple counts of chronic conditions than demographics of age and gender only. A study in Chile showed that the demographic model explains 2.6% of expenditure compared to 36.1% with a morbidity model (14 times better).[70] Their multi-morbidity measures for capitation adjustments were simple counts of chronic conditions using an 18-category count of Expanded Diagnostic Clusters (EDC) diagnoses.[71] A major problem in South Africa and internationally is the availability of data to adjust risk.[72] Greater data collection using electronic health records will improve an understanding of the area of clinical risk management.[73] The problem with morbidity adjustment is that doctors select sick patients and up-code fraudulently, but this is considered preferable to not adjusting.[71]

A formula for adjustments of global payment rates (similar to the Carr-Hill Formula in the United Kingdom (UK) and using the Keycare Table as a departure point in South Africa) can take account of patient age and gender in the beginning. Patients with higher deprivation also have higher costs.[71] There should be a marginalisation adjustment

based on deprivation indices by ward and this should be factored into pricing to address population needs accordingly. This can be achieved using geo-spatial mapping and analysis with factors important to health, like density of population, access to current health facilities, socio-economic variables and rural challenges like roads and amenities. This could be priced in to address demand-side community needs.

The capitation payment can be also adjusted using current Keycare data on multimorbidity (both the type and mix) and Risk Equalisation Fund data. As implementation proceeds and more data is collected within the NHI it may expand the morbidity mix and complexity levels, and include adjustments for newly registered users and cost of living per area (as in the UK). The design objective is to internalise multimorbidity adjustments early in the implementation to prevent the anchoring that occurs once pricing is set and there is resistance to change subsequently. Whilst there is the risk of over-diagnosing and upcoding for improved payments the evidence is that the benefits outweigh this, as users can be better identified and their care improved dramatically to alter outcomes, especially hospital costs. This will supported by the data that comes from Comprehensive Health Checks that warrant it being paid on an additional fee-for-service basis and that can be more firmly structured to provide high-quality data. Processes to confirm data validity can be included in the claims process, performance management and with random audits of Community Practices.

The details of the payment system and issues are in the NHI PHC CONTRACT RULES: PAYMENT, attached to the contract and should be reviewed annually.

Rural Adjustment

Rural adjustments are required for geographical differences in capital and labour.[74] There is clear need to rural-proof any planned implementation of NHI and PHC Re-engineering. There is a challenge with distribution of doctors across the country, with more doctors in urban centres and provinces like Gauteng. Whilst the model being considered encourage larger panels (and subsequent shifts to areas of need) there is a serious risk that persistence of small panels of capitation may not change that equation. An adjustment to payment levels needs to be considered for rural providers. Unfortunately, there is no standardised definition of rurality. Marginalised communities struggle with more pronounced social determinants of health, financial barriers to access, inadequate transport, distance to facility, poor infrastructure and understaffing.[75] Key drivers for healthcare professionals to migrate away from rural settings are poor working environment, difficult living experiences (personal security, poor living conditions, poor economic rewards and social/cultural difficulties) and poor career paths.[76] A Geographic Information System (GIS)-based spatial analysis was done in South Africa in 2012 and showed the health facilities per population of 10 000 at municipal level and the number of facilities by square kilometre, thus prioritising areas for health care intervention. Unfortunately it does not account for private general practitioners and is dated to 2010, before the last Census.[77] There are more robust ways to examine the distribution of services in primary health care and explore variables in a map overlay and with spatial analyses. These can explore densities of population by units within a district to explore access to any health care facility (GP, clinic and CHC) and explore variables that influence out-migration of health professionals. These can be used to adjust capitation pricing to enable better redistribution of healthcare professionals and better services planning.[78] This is necessary to address the current inequities.[79]

The challenge is to address supply-side issues now, with health professionals needing to be incentivised to move into rural communities. There should be a fair rural adjustment of the capitation rate. This could be framed as a rural allowance rather than as an adjustment of capitation. Accommodation for staff should also be included in the infrastructure grant/support in remote communities. The design objective is to internalise rural adjustment early in the NHI PHC Capitation implementation (even if overreaching) to prevent the anchoring that occurs once pricing is set and there is resistance to change subsequently. The details of payment system and issues are captured in the **NHI PHC CONTRACT RULES: PAYMENT**, attached to the contract and should be reviewed annually.

Payment-for-performance

Payment-for-performance is a growing feature of payment systems across the world in many different settings. It should complement other payment methods. It attempts to address the weaknesses of a capitation model in the lack of transparency and the need to monitor the moral hazard of reduced access and unnecessary referrals.[8,19,26] Quite often payment-for-performance lacks meaningful and actionable measures.[7] It can be confusing with too many indicators and akin to cook-book medicine where the indicators are not evidence-based. It may also divert attention from things that are required. A major problem is that the incentives are not high enough to overcome the administrative expenses required to implement it. If the targets are set unreasonably high then it can also become a disincentive.[6,74] Pay-for-performance accounts for 20% of the UK doctors' income. It is based on 146 quality indicators, including smoking status.[74]

Pay-for-performance should be focused on chronic care and prevention using best evidence clinical practice guidelines and be transparent. There should be peer-based scorecards that measure clinical process and outcome of care, patient experience and costs. The payment as a percentage of overall payment should be substantial, with 10%-25% preferred. The process should be phased in. It needs regular random audits. Payment should made monthly to smooth cash flow. There are a number of performance measure including HEDIS, QOF, ICHOM, PROMs.[5–10] The key would be to look at data that is possible to collect currently using electronic health records in the market and to jointly coordinate the development of a standard interoperable set of performance indicators that are collected routinely from contracted practices, given that an electronic health record is to be made mandatory. There are several software houses in South Africa that are having electronic health records (EHR's): HealthOne, Synaxon, Healthbridge, eMD, VP Health, Bluebird, Healthspace, Lifedoc etc. In the absence of a clear standard for EHR's being set it is preferable in the feasibility stage to collect data from currently used practice management software using consultation, ICD, medication, tests ordered, x-rays ordered, procedures. There is also the possibility of performance measures including evaluations done by the contracted practice that are either submitted to the NHI or available on random audits. The details of payment system and issues are captured in the **NHI PHC CONTRACT RULES: PAYMENT**, attached to the contract and should be reviewed annually.

Some useful performance outcomes suggested are listed below (based on JLN Performance Indicators^, Ideal Clinic Criteria* and Quality Outcomes Framework#) Some of these should be selected for feasibility testing as they can be measured via practice management software and via simple reporting from NHI Referral Networks.

ADMINISTRATIVE

1. Percentage of enrolees to panel size agreed^
2. Percentage of enrolees with at least 1 visit per year^
3. Total number of visits or services per enrolled person^
4. Percentage of enrolled/registered individuals with at least one primary care visit in a one-year period^
5. Percentage of visits or services delivered with the purpose of preventing illness (as defined e.g. Pap smears/Mammogram and Eye exam in past year)^
6. Average number of daily visits per contracted provider per day^
7. Total cost per unit of service/visit^
8. Percentage medicines of total cost^
9. Total number of visits or services attributed to tracer condition per enrolled person^
10. Number of patient complaints
11. Referral rate per 1000 population^
12. Average number of referrals made by Contracted Providers per visit in the defined time period^
13. Average number of admissions for defined primary care-sensitive diagnoses per 1,000 population in the defined time period
14. Percentage of patient hotline complaints addressed within 1 week.
15. Percentage practices compliant with COPC / Quarterly Community Forum Meetings
16. Percentage of practices compliant with monthly DHIS reports by 7th of next month
17. Percentage of practices compliant with EHR and monthly EDI submissions
18. The designated doctor of the contracted provider participates in an external peer review with other Contracted Providers who are members of the same NHI Referral Point group to compare its data with that of the other Contracted Providers. The Contracted Provider agrees an improvement plan with the group. The review should include, if appropriate, proposals for improvement to access arrangements in the Contracted Providers premises in order to reduce avoidable problems and may also include proposals for service design improvements#
19. Completion of the Diploma, Fellowship or Masters in Family Medicine (and constituting 25% of the total)

The following performance outcomes (based on JLN Performance Indicators^, **Ideal Clinic Criteria*** and Quality Outcomes Framework#) are challenging without an EHR or the submission of DHIS data, although they can even be sent in Excel format monthly to begin with. These should be deferred to Year 2 and later as part of a 5-year negotiated plan for Payment for Performance. These indicators may be:

MOTHER AND CHILD

1. **The percentage of women booked before 20 weeks of gestation***
2. The percentage of pregnant females with at least 4 ANC visits
3. The percentage of children with two measles vaccination by two years
4. **The percentage of children under one year with full immunisation coverage***

COMMUNICABLE DISEASES

5. The percentage of patients tested for HIV in the last year
6. **The percentage of HIV-positive patients tested enrolled in CCMDD HIV treatment programme within two weeks of diagnosis***
7. The percentage of HIV patients on treatment with undetectable Viral Load on annual test
8. **The percentage of HIV-positive patients retained on HIV treatment programme***
9. The percentage of TB case detection rate of HIV positive patients
10. **The percentage of successful treatment of TB using 6 months negative sputa***
11. **The percentage of new pulmonary TB patients defaulting from those on treatment***
12. **The percentage of antenatal patients enrolled in CCMDD HIV treatment programme***

NON-COMMUNICABLE DISEASES

13. The Contracted Provider establishes and maintains a register of patients with established hypertension#
14. The percentage of patients with hypertension in whom the last blood pressure reading (measured in the preceding 9 months) is 150/90 mmHg or less#
15. The percentage of patients aged 79 and under with hypertension in whom the last blood pressure reading (measured in the preceding 9 months) is 140/90 mmHg or less#
16. The percentage of hypertensive patients having creatinine and/or eGFR done annually
17. The Contracted Provider establishes and maintains a register of patients with peripheral arterial disease#
18. The Contracted Provider establishes and maintains a register of patients with coronary heart disease#
19. The Contracted Provider establishes and maintains a register of patients with heart failure#
20. The Contracted Provider establishes and maintains a register of patients with stroke or TIA#
21. The Contracted Provider establishes and maintains a register of all patients aged 17 and over with diabetes mellitus, which specifies the type of diabetes where a diagnosis has been confirmed#
22. The percentage of patients with diabetes, on the register, in whom the last blood pressure reading (measured in the preceding 12 months) is 150/90 mmHg or less#
23. The percentage of patients with diabetes, on the register, in whom the last blood pressure reading (measured in the preceding 12 months) is 140/80 mmHg or less#
24. The percentage of patients with diabetes, on the register, whose last measured total cholesterol (measured within the preceding 12 months) is 5 mmol/l or less#
25. The percentage of patients with diabetes, on the register, who have a record of an albumin : creatinine ratio test in the preceding 12 months#
26. The percentage of patients with diabetes, on the register, in whom the last HbA1c is 7.5% or less in the preceding 12 months#
27. The percentage of patients with diabetes, on the register, in whom the last HbA1c is 8% or less in the preceding 12 months#

28. The percentage of patients with diabetes, on the register, who have a record of retinal screening in the preceding 12 months#
29. The percentage of patients with diabetes, on the register, with a record of a foot examination and risk classification: 1) low risk (normal sensation, palpable pulses), 2) increased risk (neuropathy or absent pulses), 3) high risk (neuropathy or absent pulses plus deformity or skin changes in previous ulcer) or 4) ulcerated foot within the preceding 12 months#
30. The Contracted Provider establishes and maintains a register of patients with hypothyroidism who are currently treated with thyroxine#
31. The percentage of patients with hypothyroidism, on the register, with thyroid function tests recorded in the preceding 12 months#
32. The Contracted Provider establishes and maintains a register of patients with asthma, excluding patients with asthma who have been prescribed no asthma-related drugs in the preceding 12 months#
33. The percentage of patients aged 8 and over with asthma on the register, with measures of variability or reversibility recorded between 3 months before or any time after diagnosis#
34. The Contracted Provider establishes and maintains a register of patients with COPD#
35. The percentage of patients with COPD in whom the diagnosis has been confirmed by post bronchodilator spirometry between 3 months before and 12 months after entering on to the register#
36. The Contracted Provider establishes and maintains a register of patients aged 18 and over with CKD (US National Kidney Foundation: Stage 3 to 5 CKD) #
37. The percentage of patients on the CKD register in whom the last blood pressure reading (measured in the preceding 12 months) is 140/85 mmHg or less#
38. The percentage of patients on the CKD register with hypertension and proteinuria who are currently treated with an ACE-I or ARB#
39. The percentage of patients on the CKD register whose notes have a record of a urine albumin : creatinine ratio (or protein : creatinine ratio) test in the preceding 12 months#

MENTAL HEALTH

40. The percentage of patients with a new diagnosis of depression in the preceding 12 months, in the target population, who have had a bio-psychosocial assessment by the point of diagnosis. The completion of the assessment is to be recorded on the same day as the diagnosis is recorded#
41. The Contracted Provider establishes and maintains a register of patients with schizophrenia, bipolar affective disorder and other psychoses#
42. The percentage of patients with schizophrenia, bipolar affective disorder and other psychoses who have a comprehensive care plan documented in the record, in the preceding 12 months, agreed between individuals, their family and/or carers as appropriate#
43. The Contracted Provider establishes and maintains a register of all cancer patients defined as a ‘register of patients with a diagnosis of cancer#
44. The Contracted Provider establishes and maintains a register of patients aged 18 and over receiving drug treatment for epilepsy#

45. The percentage of patients aged 18 and over on drug treatment for epilepsy who have been seizure free for the last 12 months recorded in the preceding 12 months#
46. The Contracted Provider establishes and maintains a register of patients aged 18 and over with learning disabilities#

ELDER HEALTH

47. The Contracted Provider establishes and maintains a register of patients diagnosed with dementia#
48. The percentage of patients diagnosed with dementia whose care has been reviewed in the preceding 12 months#
49. The Contracted Provider establishes and maintains a register of patients#: Aged 50 or over and under the age of 75 with a record of a fragility fracture on or after 1 April 2012 and a diagnosis of osteoporosis confirmed on DXA scan, and Aged 75 and over with a record of a fragility fracture on or after 1 April 2012
50. The percentage of patients aged 50 or over and under the age of 75, with a fragility fracture on or after 1 April 2012, in whom osteoporosis is confirmed on DXA scan, who are currently treated with an appropriate bone-sparing agent#
51. The Contracted Provider establishes and maintains a register of patients aged 16 and over with rheumatoid arthritis#
52. In those patients with a new diagnosis of hypertension aged 30 or over and under the age of 75, recorded between the preceding 1 April to 31 March (excluding those with pre-existing CHD, diabetes, stroke and/or TIA), who have a recorded CVD risk assessment score (using an assessment tool agreed with the NHS CB) of ≥20% in the preceding 12 months: the percentage who are currently treated with statins#

PREVENTIVE CARE

53. The percentage of patients aged 40 and over who have a record of blood pressure in the preceding 5 years#
54. The Contracted Provider establishes and maintains a register of patients aged 16 and over with a BMI ≥30 in the preceding 12 months#
55. The percentage of patients aged 15 and over whose notes record smoking status in the preceding 24 months#
56. The percentage of patients with any or any combination of the following conditions: CHD, PAD, stroke or TIA, hypertension, diabetes, COPD, CKD, asthma, schizophrenia, bipolar affective disorder or other psychoses whose notes record smoking status in the preceding 12 months#
57. The Contracted Provider has a protocol that is in line with national guidance agreed with the NHSCB for the management of cervical screening, which includes staff training, management of patient call/recall, exception reporting and the regular monitoring of inadequate smear rates#
58. The percentage of women aged 25 or over and under the age of 65 whose notes record that a cervical screening test has been performed in the preceding 5 years#
59. The Contracted Provider establishes and maintains a register of women aged 54 and under who have been prescribed any method of contraception at least once in the last year, or other clinically appropriate interval e.g. last 5 years for an IUS#

The proposal is for performance indicators to be few and very practicable given that EHRs may not be available immediately, and that basic claims and ICD10 data may be all that is collected using payment management software and electronic data interchange with NHI administrators. The design objective is to establish performance management even if the requirements are low at the outset. The point scoring system needs to be very clear, simple and transparent, enabling Contracted Providers to measure their own performance easily and predictably. Performance management will have to evolve year by year to avoid being gamed and to reflect on performance that matters.

A draft payment-for-performance (P4P) point system has been developed. It has 400 points allocated to the 77 indicators above distributing the points equally between the six elements of: administration, maternal child health, communicable disease, non-communicable disease, mental health-elder health-prevention and peer review (using the QOF as guidance). An accredited Contracted Provider can achieve ±60% compliance with just providing records, participating in a peer review process and the designated doctor completing a Diploma in Family Medicine.

Population level data should be collected over time e.g. data per ward, population service use and satisfaction rates, population risk measures e.g. body mass index, smoking and behaviour changes. Whilst monitoring via EHR is useful there should also be evaluations done by contracted practices and annual randomised audits in five-year cycles by NHI administrator inspectors should include these evaluations, quality improvement projects and other outcomes e.g. minutes.

The details of performance management are in the **NHI PHC CONTRACT RULES: PERFORMANCE MANAGEMENT**, attached to the contract and should be reviewed annually.

Costing

There is very little available on costing in the NHI environment and most of it is 'top down'.[80] Preliminary costing suggests that the NHI may cost R176b for 'basic primary care'. This is fee-for-service-driven but capitation is expected to be different. Doctors are expected to play a strong rationing role.[81,82] However, take-up in capitation contracts depends on private providers being willing to accept payment rates offered to it.[83] Lower reimbursement rates may be accepted by GPs with the surety of predictable and substantial income streams.[80] The study on GP contracting in 2011 showed GPs pricing themselves at a cost almost the same as public service expenditure at the time.[84] But how would GPs now cost their services and what could a possible GP fee be for a capitation service?

Costing could be top-down or bottom-up. Costing should be triangulated using normative, private and public costing. Costing at a simple practice management level occurs with turnover, staffing, operational and investment costs and can be reconciled to a breakeven point. Green (1995) recommends activity-based costing in developing countries with identification of the activity and the resources required. He identifies an item checklist, which includes buildings, equipment, furnishing, transport, communication, energy, water, food, housekeeping, medical / laboratory supplies, general administration, personnel and consultancy services. Costs are divided into fixed

and variable. Most doctors function at the level of average costs with only a few thinking in detail of direct / indirect costs i.e. related to activities, marginal costs i.e. the cost of one extra with fixed costs, cash-flow and the demand elasticity for specific care. Staffing costs tend to be the biggest element in the public service.[73,85–87] Most of the financial experience of GPs is limited to fee-for-service payments and based on increasing patient visits by driving service needs. In capitation the population is fairly captive per year and the pressure may be on reducing the number of visits as the payment is per person per year and not for service.[86] The study on GP contracting in 2011 showed that GPs saw high patient utilisation and the impact of larger practices on their current practices as risks.[84] There is little reliable utilisation data currently available.

Their costs and risks would be the number of patient visits they would have to cater to. This would be a function of the visit rate and size of panel capitated. The current visit rate in the district health service is approximately two visits per person per year but expected to be three.[88] A GP's immediate anxiety would be about knowing and responding to the number of patients from a full population of 10 000 people now possibly appearing at the doctors' rooms daily for the range of services committed to. A practice population of 5000 would yield 120 visits per day based on a utilisation rate of six visits per person per year. Four of this would be expected, within the DHS, to be for personal curative services (based on KeyCare experience) and two for preventive-promotive services as seen in the District Health Expenditure Review of Johannesburg Metro District Health Services.[89] This may require more and varied staff in a PHC team structure (considering the need for teamwork with more nurses etc.).[80] This may also require an increase in operational costs (with greater space etc. and related expenses) and an increase in investments (including equipment etc. for the wider range of services).

It is actuarial mindlessness to simply convert fee-for-service claims data into monthly capitation payments and adjust for age and gender. Fee-for-service generates many low value visits, with the tyranny of the urgent and less focus on prevention and comorbidity. It is difficult for fee-for-service to address the real need in primary care.[7] Being gatekeeper in a capitation model requires an effort that is not usual in a fee-for-service environment. Capitation is good as it puts performance risk on the provider and encourages newer organisation.[5] However, increased patient numbers and the diversity of team demand different doctor skills: outreach, education, coordination, teamwork, meetings, more staff management, EHRs, self-help and a new practice model.[90] New skills are required as it is more about clinical integration rather than organisational integration. The biggest challenge is to allow sufficient time for new care models to evolve and mature. Change must allow time for GPs and specialist to work together, organisational realignment to support outcomes, engagement in the EMR as a powerful enabler, a focus on case management of high-risk patients to reduce hospital costs, a health promotion outreach, involving patients and families in decisions and practice.[91] Practices need support in these changed roles and new leadership skills.[92] Primary care work changes to act more as patient manager in a health system rather than just providing services.[9] Transformation requires several cultural shifts, not just internally but in relation to other parts of health system that need to be staged and managed.[8,93] Successful change leadership involves investing time in finding common ground across stakeholders and in building credibility and trust.[94] Managers often focus on waste at production level but fail to realise that 95% of waste is at case- and population-level, needing clinicians to be given space to make savings on specific cases and across their population. To cut waste, providers have to innovate and that requires investment.[95]

Payment level should be set not only to compensate for the extra care provided in primary care and to support change (including infrastructure) but also to attract more doctors into primary care.[96]

Keycare (within Discovery Medical Scheme) is the only medical scheme that pays a capitation fee directly to GPs. Keycare has two rates, one for dispensing (inclusive of medicines) and one for non-dispensing doctors. The Keycare Open and Access service range includes ambulatory care, limited dentistry and optometry, specialist referrals via a panel and hospitalisations in network hospitals. Contracted GPs are paid capitation fee of an average of R50 per month (after adjustments) and a non-dispensing fee-for-service of R132.50 for a visit (with unlimited visits to allocated GP and two out-of-network GP visits per annum allowed). The average utilisation rate for Keycare is 4 visits per person per year. There are preliminary estimates that Keycare group members cost R1913 pppy in full year 2017 (including GP consults, procedures, acute and chronic medication, emergency consults, pathology and radiology) for out-of-hospital primary care. District Health Service (DHS) Expenditure for 2016/2017 is R1726 per person per year with PHC expenditure (excluding hospital, forensics and management) at R1054 per person per year, or R389 per visit at a visit rate of 2.71 per year.[97] Other elements will need consideration in the capitation modelling: investment costs for facilities and more sophisticated equipment and technology, that are currently not configured into DHS expenditure.

Medicines

Even though medicines are not part of the capitated payment the management of this will affect the take up by private general practices. Medicines are an important of the care provided and often influence a doctor to dispense medicines. Government should arrange that contracted providers can purchase an agreed extended PHC formulary of medicines based on the Essential Drug List. Dispensing Community Practices will provide their users with medication, and then bill the NHI using single exit pricing and a dispensing fee. Non-dispensing Community Practices can send their users to contracted pharmacies to collect medication, who then bill the NHI with a dispensing fee. Contracted providers should also be able to access the Chronic Care Medicine Dispensing and Distribution (CCMDD) programme, which currently delivers a range of chronic drugs to users at various pickup points including doctors rooms. A simple list of drugs in a PHC formulary is attached to the contract. This is derived from the list of drugs available in CHCs and tested for suitability with PHC clinicians. This should serve to constrain utilisation together with drug utilisation reviews, as part of the peer review system, and performance management. Prescribing and dispensing should be aligned with pharmacy laws and regulations in South Africa, allowing off-site pharmacists supervising pharmacy assistants based in clinics and practices. The details are captured in the **NHI PHC CONTRACT RULES: MEDICINES**, attached to the contract and should be reviewed annually.

Lab Tests

A similar arrangement for a PHC list of investigations, based on the Essential Lab List, has been made using National Health Laboratory Service (NHLS) and commercial laboratories. Contracted providers would then use them, with labs billing the NHI at state-defined prices. This should serve to constrain utilisation together with lab

utilisation reviews, as part of the peer review system, and performance management. Limiting lab tests to be done only with NHLS may jeopardise contracting it is seen as unresponsive to private providers, with their experience in the public service of lost blood tests. There is also the opportunity for NHLS to be more responsive to the needs of contracted providers (especially the private sector), price more appropriately given the NHI and hence become more sustainable with non-price competition. The link to NHLS should be a condition for accreditation of suitable electronic health records. The details are in the **NHI PHC CONTRACT RULES: INVESTIGATIONS**, attached to the contract and should be reviewed annually.

Radiology

The same should apply for a simple PHC list of radiology that can be ordered at local contracted radiology practices, CHCs and/or Hospitals, which contracted providers would use, with these practices then billing the NHI at state-defined prices. This will serve to constrain utilisation together with radiology utilisation reviews as part of the peer review system and performance management. The details are in the **NHI PHC CONTRACT RULES: PROCEDURES**, attached to the contract and should be reviewed annually.

Preventive Services

Contracted providers should be paid fee-for-service for certain preventive services e.g. Pap smear, family planning and baby wellness visits (including immunisations) per visit using current private sector prices as a guide. The details are in the **NHI PHC CONTRACT RULES: PREVENTIVE SERVICES**, attached to the contract and should be reviewed annually.

Procedures

Contracted providers should be able to do certain procedures and be paid fee-for-service for any additional procedures as per list and fee schedule derived from the NHRPL. A simple Procedures List for PHC has been derived from the list of procedures common to PHC and tested for suitability with PHC clinicians. Pricing of procedures is based on NHRPL-listed prices and bundled to include the consumables required, to manage utilisation challenges. The details are in the **NHI PHC CONTRACT RULES: PROCEDURES**, attached to the contract and should be reviewed annually.

Infrastructure

Services should generally be delivered in the contracted providers own facilities. It is also important to assess the relative ability of public and private sectors to respond and to ensure a level playing field as there are differences between the public and private sector in competing infrastructurally. The private sector is disadvantaged with higher input costs e.g. previous capital outlays.[48,74] Estonia found that the capitation scheme was limited by the pressure on family doctors infrastructure.[52] The playing fields need to be made completely level to allow universality and appropriate cost-management.[28,29] There should be no state cross-subsidisation of public service providers, in any form, once they are contracted by NHI (whether funds, staff, goods, services or tax exemptions). This is to ensure operational accountability and integrity, and a level

playing field for all contracted providers. The cross-subsidy in the form of investment (which may be in the form of building, refurbishments, training and business support to meet accreditation requirements) needs to be also quantified to enable private providers to be supported similarly.

Facilities could be supported as part of the capitation payment or with facility grants conditional on panel size, considering the hidden costs of public health service facility investment in the pricing of district health expenditure and the inequity of state cross-subsidies. The design objective is to ensure facility capital investment does not limit the expansion of contracted providers to enrol larger populations. The design objective is to generate private investment, reduce the cost to the fiscus for useful and needed social infrastructure and reduce the ongoing cost of maintenance of such infrastructure.

Contracted providers may also negotiate to rent a clinic or CHC space and be seconded public service staff still employed by the government. These contracted providers can be paid as per their payment choice but the rent and staff salaries should be journaled against their payment . This rent could be developed as a standard national / provincial or district rate per square metre (including related expenditure). Contracted providers could also be given the option of purchasing clinics at market-related or discounted prices if they are contracted to provide services in the area**.** The design objective is to ensure that public services are not neglected and that transformation can be sustained. However, there is the danger of cross-subsidisation of contracted providers from state coffers outside of the NHI Fund and the danger of corruption with local sales of government assets at discounted prices.

ICT/EHR should be supported as part of the capitation payment or with ICT grants. The design objective is to ensure IT/EHR capital investment does not limit the contracting process and to ensure that digitalisation of primary health care is prioritised. The design objective is to generate private investment, reduce the cost to the fiscus for useful and needed social infrastructure and reduce the ongoing cost of maintenance and depreciation of such infrastructure.

A minimum pre-payment of R50 000 per month from contract initiation should be made by the NHI administrator for six months to especially engage young doctor's post-community service and without the funds to manage immediate cash flow challenges to set up whilst enrolling to their Community Practice. The design objective is to attract young professionals into primary care, especially with the large Nelson Mandela-Fidel Castro Medical Education project possibly introducing large numbers of newly-trained doctors whose training is very suited to managing a defined population. The details of payment system and issues are in the **NHI PHC CONTRACT RULES: PAYMENT**, attached to the contract and should be reviewed annually.

Other Costs

There are other costs that impact on the private sector that will need to be accounted for. These include Value-Added Tax on provider income, rates on property owned as well as depreciation on equipment. The details of payment system and issues are captured in the **NHI PHC CONTRACT RULES: PAYMENT**, attached to the contract and should be reviewed annually.

CONTRACTING DETAILS

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Contract Issues

The following issues have been elicited from GP contracts in New Zealand and the United Kingdom. A South African contract lawyer has incorporated these into the draft contract.

- The commencement and term of the contract shall be stipulated in the contract (date specified on cover page),or be amended by virtue of the operation of any other legal provision and the end date as per agreement
- The contract will be renewable ten yearly to provide stability for investment to cater to the large practice size.
- The parties shall agree to act in good faith and take responsibility and liability
- The parties shall agree that Contracted Provider is independent and not an employee, agent or subsidiary and Contracted Provider agrees it has no authority to act on behalf of NHI
- The parties warrant that they have the power to enter into the contract
- The roles and responsibilities of each shall be stipulated
- The roles and responsibilities of other stakeholders shall be stipulated (NDOH, NT, NHIF, OHSC, NHIRD, HPRS, SBC, PMO, DHMO, CUP)
- The relationship between parties shall be to: work together: act in accordance to the constitution and law, adopt a whole system approach, support clinical leadership and clinically-led service development, conduct with honesty and integrity and develop a high level of trust, promote an environment of high quality, performance, and accountability, and low bureaucracy; work together to resolve any issues, disputes and disagreements in a manner that reflects a cooperative and collaborative relationship, see to make best use of finite resources to achieve optimal health outcomes for enrolled persons; adopt an open and transparent approach to sharing information, respect and maintain patient confidentiality, remain flexible and responsive to support the evolving health environment, develop, encourage and reward innovation and continually challenge services to achieve high quality outcomes, actively support and build on the successes of each of us
- The contracted provider functions and outcomes are to provide services with reasonable care and skill; provides services to any person entitled with service if they are or believe themselves to be ill; facilitate and promote service development, coordination, continuous improvement and integration; participate in the development and agreement of the DHMOs annual plans; ensure accountability for the delivery of the service; provide infrastructure, administrative and support services in respect of services; and ensure outcomes of optimum health, clinical and financial sustainability, quality coordinated care delivered by multidisciplinary teams that is accessible; and reduce disparities in health.
- The contract shall for provision of services, with each registered patient assigned to an accountable doctor for care by his/her team and informed of it.
- The premises shall be stipulated with an address of location, and other secondary service addresses if it is to provide services to the enrolled population
- Minimum requirements for accreditation shall be referenced as an addendum
- There needs to be a simple and transparent application and review process

- Contracts should not need changing too often and thus we should keep variables that may change year-by-year referenced as separate processes with clear and agreed integrity e.g. changes to service package, performance outcomes, and payment terms gazetted in terms of negotiations in a formal legal forum involving Contracted Providers and the NHI..
- The contract needs to state compliance with laws, regulations and requirements
- Reporting requirements need to be a simple and transparent
- The service description and options should be simply stated and described more fully in NHI PHC CONTRACT RULES as an addendum that may be revised annually after negotiations
- The core hours need to be stated e.g. 8am-6.30pm (UK)
- Out-of-hours arrangements need to be stated, including medicines supply
- The persons who perform services needs to be stated, with qualifications, trained, and having clear terms and conditions of employment
- No sub-contracting should be allowed except if reasonable and the person is qualified, competent and accredited to provide services, and then subject to application to the NHIF
- The contract shall include responsibility and liability for others e.g. employees failing to comply with contract
- The contract should guide the signing of documents including medical certificates, possibly as an NHI PHC CONTRACT RULES.
- The contract should guide record-keeping as a **NHI PHC CONTRACT RULES: DATA MANAGEMENT** including electronic requirements, allow NHI access, providing a summary care record for Users changing Contracted Providers, allowing electronic transfer between practices, ensuring confidentiality of patient data
- The Contracted Provider should notify the NHI / DHMO of a death on the premises
- The contract should guide audits as a referenced addendum, including giving NHI/OHSC reasonable access to information and facility to be able to carry out accreditation and/or audits, with reasonable notice-process-promptness, expectations for Contracted Providers of staff to participate and cooperate, describing the process of providing the outcomes in draft and final format, allowing reasonable steps to implement finding, allowing a repeat audit if reasonable and including sub-Contracted Providers
- The contract should guide enrolment more explicitly as a referenced addendum, including the specific enrolment requirements, defining persons as per the NHI Bill, defining enrolments very clearly with Contracted Provider accepting Users and submitting in writing to NHI and NHI Fund acknowledging acceptance in writing or using HPRS, guiding contentious enrolments e.g. across district boundaries, defining how to keep a list of Users accepted available, defining rules around assigned Users and application for inclusion in the list by immediate family member if the panels are closed, defining removals from the list, defining applications process for closure e.g. send written application with motivation, period and plans for reopening. The NHI may provide support to keep the practice open. Where there is approval of closure this must be in writing and clearly visible for Users.
- The Contracted Provider must not, either itself or through any other person, demand or accept from any of its Users a fee or other remuneration for its own

benefit or for the benefit of another person in respect of services provided Patient Fees

- The Contracted Provider must keep a register of gifts with name of donor, nature of gift, value of gift and name of person receiving the gift
- The Contracted Provider must have in place an effective system of clinical governance which includes appropriate standard operating procedures and a responsible person
- Financial arrangements and reporting requirements shall be stipulated with the Payment Rules for PHC Contracting as well as PHC Contracting Manual, including control measures
- The contract shall include a prohibition on incentives and inducements from a referred service provider.
- Except as required in the contract, neither parties will disclose any confidential information
- Neither will make public statements in relation to this agreement without discussing it or using reasonable endeavours to discuss it. This does not prevent discussing it with parties relevant to the agreement or commenting publicly on public policy matters.
- Neither will make use of others name or logo, or the relationship in advertising or promotional material without written consent from the other
- The Contracted Provider must at all times have in force, in relation to itself, an indemnity arrangement which provides appropriate cover – both clinical and public liability
- No term of this Contract shall survive expiry or termination of this Contract. This contract will supersede any prior agreements. The contract shall be governed by South African law.
- The parties may waive a specific right by notice. However, failure to act on any condition of the contract shall not act as a waiver of them.
- Neither will be able to assign nor transfer any or all of the rights and obligations without the others written consent, which will not be unreasonably withheld.
- The NHI may vary the contract without the Contracted Providers consent if is it is reasonably satisfied that the variation is necessary to comply with any law and will give reasonable notice in writing to the Contracted Provider of the wording of the proposed variation and the date on which that variation is to take effect. Variation may also take place, with due notice, if the Contracted Provider wishes to change its legal status.
- Neither party shall be responsible to the other for uncontrollable events (force majeure).
- If any clause is held to be invalid by any court it shall not affect the whole contract.
- The parties must make reasonable efforts to communicate and cooperate with each other in disputes, with a dispute resolution procedure made clear (including mediation and arbitration)
- Notices should be in writing by facsimile, email, personal delivery or post to details provided
- These contracts may be terminated when it is due for renewal. The parties may agree in writing to terminate the Contract. The requirement is for both parties to provide due notice: two years for Community Practices.
- The contract may also be terminated within three months upon non-compliance of the terms of the contract, risk to patient safety, risk of material financial loss to

the NHI, untrue information provided, being convicted of a crime, for unlawful sub-contracting, subject to failure to remediate inspection findings or demands for compliance within three months. There will be adequate notice, a breach and remedial process, sanctions including withholding payments, dispute resolution and an appeal process, all within reasonable periods.

- The contract should end or begin with details of the parties and their signatures
- The parties should agree to comply with requirements in each referenced document, made available on the governments website

WAY FORWARD

CONTENTS

National Monitoring & Evaluation

Any implementation of payment reform needs to have evaluations done from the start.[98] It should explore the way people are covered bottom up: in terms of enrolment, in terms of service benefits, in terms of management of money, and in terms of healthcare provision. It should be planned with the transitory stepping stones.[99] It should use simple, flexible monitoring systems that make use of existing data. It is best to select a few simple indicators and ensure that it is useful.[15] JLN recommend a menu of indicators dealing with equity and fairness, access, quality, efficiency, financial sustainability and administrative efficiency.[100] There are other indicators that are recommended to monitor the implementation of universal health coverage: dealing with financial coverage e.g. catastrophic health expenditure and service coverage e.g. family planning needs satisfied under prevention or hypertension treatment under treatment.[101] There are also eight core tenets of primary care improvement that should be addressed: the multidisciplinary team, hospital integration, horizontal integration with public health, e-health, strong referrals, and good measuring indicators.[14]

National Engagement

It is important to ensure a national representative group is engaged, common ground is explored to build collaboration, trust is built slowly and that this process continues with regular (2-3 mthly) consultative processes with joint agenda setting.[15,102] Any implementation of payment reform requires mapping of stakeholders and then stakeholder engagement. The JLN considers it very important to establish a stakeholder forum to help evolve the right mix of financing and payment instruments as the context and objectives change. It is vital to actively listen to the private sector, find common ground, and to establish regular consultative processes. Draft concept papers should be circulated to stimulate discussion and to get buy-in. it should include details on primary and secondary objectives, outputs and resources needed. An engagement team should conduct specific consultations with high priority stakeholders. The details of payment system and issues are in the **NHI PHC CONTRACT RULES: NEGOTIATIONS,** attached to the contract and should be reviewed annually.

2x7 Simple Steps for Feasibility Testing

National Steering Committee / Province

1. Approve draft contract, operational manual and costing framework (including pay-for-performance).
2. Approve feasibility testing sites
3. Explore political, project and change management strategy
4. Tender out Monitoring & Evaluation (5%)
5. Tender out Administration of accreditation, NHI patient hotline and regular payments (5%)
6. Accredit practice management software for pay-for-performance
7. Arrange / Support operational elements of contract
    a. Enrolment (including HPRS set up and link to Administrator)

b. Drugs access (including pharmaceutical wholesaler arrangements)
c. Labs access (including NHLS arrangements)
d. Radiology access (developing contract and pricing)

<u>District / Sub-District</u>

1. Identify specific sub-districts and/or vulnerable population sites and/or geographical bounds of tender with related providers e.g. Clinics, GPs/FPs and NGOs.
2. Set up a District Management Specialist Team (DMST) to support clinic readiness and the development of PHC Trusts for accredited clinic/s as legal bodies able to contract and manage funds (even as an auxiliary fund to current clinic budgets to address PFMA issues).
3. Engage Sub-district Management and set up Local NHI Team/s
4. Ensure / Support functionality of operational elements of contract
    a. Accreditation (supporting appointed administrator)
    b. Enrolment (supporting HPRS process for Contracted Providers)
    c. Drugs access (supporting local access for Contracted Providers)
    d. Labs access (supporting local access for Contracted Providers)
    e. Radiology access (supporting local access for Contracted Providers)
    f. NHI referral point at a local hospital for Contracted Providers (including appointment of NHI family physician (for peer review/training), clerk and nurse)
5. Ensure targeted communities are prepared for NHI contracting by Contracted Providers.
6. Engage Clinics, GPs/FPs and NGOs to prepare for contracting as Contracted Providers
7. Tender out Community Practices to Contracted Providers for ±50 000-80 000 people using draft contract and operational manual as template

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