DISCUSSION DOCUMENT AND CALL FOR SUBMISSIONS

Health outcome measurement and reporting: Improving the cost and effectiveness of clinical care in a competitive private healthcare sector in South Africa

28 AUGUST 2017
A. **INTRODUCTION**

1. The overarching goal of healthcare in any system including the private healthcare sector in South Africa is to improve the health outcomes of the population by ensuring that value-for-money, appropriate, high quality of care is available to patients at affordable prices and that neither under- nor over-treatment is provided. One way in which a competition based health system can promote improved health outcomes is for providers to compete on these very outcomes and for funders and patients to choose based on validated and relevant information on healthcare outcomes.

2. The Terms of Reference of the Health Market Inquiry (HMI) requires the HMI to identify any features of the healthcare sector that may harm competition and make recommendations to correct these\(^1\). The availability of relevant information without a doubt is a relevant factor in this respect. Relevant information incentivises and empowers the consumer – be it as a (potential) member of a scheme or as a patient – to make value-based choices. And it allows the providers and funders to negotiate terms and condition of contracts in a meaningful manner.

3. It has become apparent to the HMI during its investigations, through public sources, submissions, hearings and from its research that the availability of relevant, timely and validated information on provider performance and clinical outcomes of care in South Africa is poor. Information, if publicly available at all, is sporadic, incomplete, not standardized and largely irrelevant for choosing the best value of care.

4. Transparency of patient relevant outcomes of care requires the collection, processing and reporting of patient-centred data on pre- and post-intervention outcomes from patients, from registries and from clinicians. The proper use of these outcomes is what drives efficient competition and benefits largely in the following ways:

   4.1. Consumers – information on healthcare quality enable consumers to choose the most appropriate provider of healthcare given their illness and to help the provider choose the best intervention from the perspective of the patient. Choosing healthcare providers and schemes based on patient-relevant cost and effectiveness of care information in a private, competition driven system, drives competition on the correct parameters.

   4.2. Practitioners – the availability of detailed, risk-adjusted and clinician designed data on comparative healthcare outcomes in a properly safeguarded environment, allows

---

\(^1\) Terms of Reference for Market Inquiry into the Private Healthcare Sector, Government Gazette No. 37062, 29 November 2013.
medical specialists to benchmark themselves against peers and improve clinical pathways and performance. There are plenty successful examples from other countries on how this effectively changes clinical decisions and contributes to significant improvement, both in terms of cost-effectiveness and in quality and safety for the patient\(^2\). Also, the availability of comparative performance information may assist the GPs with referrals.

4.3. Facilities – data on comparative healthcare outcomes enables facilities to benchmark internally and externally and to improve their clinical processes and engagements with clinical professionals to continually improve the services offered to the public and to engage funders in informed negotiating processes.

4.4. Funders – the availability of comparable, patient-centred outcome information to members of medical schemes, will incentivise and enable medical schemes and their administrators to contract on the appropriate value-based parameters with providers. It may also allow the identification and contracting of network partners based on value of care parameters.

5. Healthcare markets generally are characterised by imperfect and asymmetric information. In South Africa, these include inadequate, difficult-to-understand-and-compare, incomplete or absent information on medical schemes benefit options. This report will focus on the quality of care and health outcomes of providers in the private healthcare sector\(^3\).

6. In the South African private healthcare system, several problems with respect to information have been identified by the HMI, including the following:

6.1. There is no systematic measurement and reporting of the outcomes and performance in the SA healthcare sector. In the absence of data on quality, competition cannot be driven by quality.

6.2. Some medical schemes and administrators take some aspects of, or a proxy for, quality of care into consideration during tariff negotiations with providers. This information may be provided by facilities and/or derived from their own claims data. However, without the buy-in of consumers and practitioners, this information is largely incomplete and

---

\(^2\) ICHOM: Building national outcomes registries in The Netherlands: The Dutch Institute for Clinical Auditing (DICA) – March 2016

\(^3\) The recommendations for outcome and performance measurement and reporting may also apply to the public sector.
unsuitable as performance indicators to compare providers in a comprehensive and standardised manner. The explicit buy-in of consumers and doctors is essential.

6.3. Hospital groups and related stakeholders collect and use performance data internally, however, these data to date is generally not shared with the general public. Even if the data was to be made public it does not reach its potential in driving competition because of the lack of uniformity and standardisation of measurement of these indicators.

6.4. And most importantly, there is no common definition of what quality is, what it is that matters most to the patient – and therefore there is no comprehensive set of relevant and common indicators that are used across the private health sector.

7. Health outcome measurement may include (1) clinical/biomedical indicators, (2) health-outcome-related performance indicators (avoidable adverse events, infection rates, time-to-treatment rates), (3) standardised clinical assessments by the treating doctor and (4) patient related outcomes (known as PRO’s or PROMS) directly collected in a standardised form from patients, without the involvement of doctors or facilities.

8. A general framework defining the nature of desired outcomes, for the healthcare consumer in South Africa, needs to be developed, as a first step in the process of providing the South African private healthcare system with relevant and comparative information on quality related outcomes.

9. Several critical success factors have been identified in this respect\(^4\), they include:

9.1. *Clinician engagement* – broad and active participation of the clinical community has been key to successful outcome measurement and reporting systems. Clinicians are motivated by outcome improvements. Outcome measurement, reporting and improvement have been shown to be the greatest when clinicians are actively involved in defining data requirements, in collecting and interpreting data as well as in leading efforts aimed at clinical improvement.

9.2. *Patients perspective* – patients are the best judge of their own health and welfare. Outcome measurement must be done from the patients’ perspective, including the patient-driven registration of symptoms, quality of life and functional status; pre- and post-intervention. Measurement of PROMs takes place without the intervention of doctors or facilities.

---

9.3. *National infrastructure* – effective systems require common standards for tracking diagnoses and treatments at a patient level; an appropriate legal framework to support the quality measurement and reporting system. IT platforms used by providers should be compatible with those that are used by the registry or organisation that collects quality data. In addition, governments providing strategic direction to measurement and reporting may be beneficial, and healthcare quality needs to become part of public discourse.

9.4. *Comprehensive, high-quality data* – it is important to ensure that the data collected by the quality measurement and reporting organisation be reliable and comparable as this helps to win the trust of providers and broader stakeholders. It requires a combination of both choosing right variables and having an adequate number of observations. Data quality control is essential for comparability, common standards for coding must be established and followed by all providers and a case mix adjustment mechanisms needs to be agreed to and applied.

9.5. *Outcome based incentives* – a staged approach to the use of outcome information must be implemented. In the first stage, after the identification, registration and analysis of agreed upon data, these detailed data must be used by doctors and facilities, primarily to test and to give feedback about their own performance and to encourage adoption of processes or change in practice that result in better outcomes. In a later stage, it is essential that tested and more high-level performance, outcome related information must be disseminated and used by funders and the general public.

10. This report provides an overview of the HMI’s findings but more importantly lays down proposals for possible recommendations that the HMI is considering. The report discusses principles underpinning patient-centred, value based care. Furthermore, contains a discussion of the key organisational, legal and financial conditions for a successful implementation of outcome based registries in South Africa and the use of these in selection and negotiation processes throughout the healthcare system. The HMI calls for submissions on the contents of this report.
B. DEFINING OUTCOMES AND OTHER MEASURES OF QUALITY

11. Outcomes refer to results achieved for a patient after a given set of interventions. Outcome measures seek to determine the impact of care received on the health status of the patient\(^5\).
   - One advantage of measuring outcomes is that they are what ultimately matters to patients. Outcome measures, when combined with cost data, enable measurement of value which is an appropriate indicator for comparing providers.
   - Whilst health outcomes are what ultimately matters, their measurement is challenging because they depend on factors other than medical intervention. These include social determinants of health, the severity of illness, age, etc. For outcome measures to be valid, it is necessary to risk-adjust the data to control for these factors.
   - Another challenge in measuring outcomes is that there is sometimes no large enough sample to provide statistically meaningful results. Often adverse outcomes are rare, resulting in a sample size that is not large enough to draw robust conclusions. This challenge is particularly worse in small hospitals that may have a small number of patients for specific procedures.

12. Process measures seek to determine the extent to which providers follow best practice when offering their services. These measures are generally linked to procedures or treatments that are known to improve health status.
   - Process measures often reflect professional standards of care. They often derive from research evidence which shows processes that reliably improve particular outcomes\(^6\). They are therefore actionable in that the measure itself prescribes actions that providers need to take to improve their performance. Calculating process measures is less complex because there is less need for risk-adjustment. Process measures can be collected immediately whereas outcome measures need more time.
   - Overreliance on process measures is however discouraged for a number of reasons. Even though process measures often reflect professional standards of care, they do not always predict outcomes. Process measures may not directly measure the effectiveness and appropriateness of care, even as they give credit for performing a particular action\(^7\).

---


\(^7\) A hospital might receive credit for administering a recommended medication, even if the wrong dose is administered, or used in a patient at risk for an adverse drug interaction.
13. Structural measures refer to the attributes of the settings in which healthcare occurs. It includes attributes such as number and qualifications of practitioners, equipment, administrative systems, and the internal organisation of medical facilities.

- Structural measures share the same weakness as process measures in that they do not always predict outcomes. Structural measures are necessary, but not sufficient, to ensure that providers deliver good outcomes. They should, therefore, be considered as an important part of quality measures, but should never be relied on as a sole measure of quality.

14. In practice, there appears to be an overreliance on structure and process measures\(^8\). However, given that these are not good predictors of actual health outcomes, it would be prudent to aim to make use of outcome measures. Where necessary, these can be complemented with structure and process measures, because outcomes depend on structure and process. Without adequate and skilled clinical staff, effective administrative systems and well-equipped facilities it is impossible to achieve good health outcomes. And if medical practitioners are not following good clinical practice, it is also not possible to achieve good health outcomes.

15. It is however recommended that the mix of performance measures should be biased more towards outcome measures\(^9\). Examples of each type of measure from the Agency for Healthcare Research and Quality (AHRQ) are shown in Table A1 in the appendix.

16. In addition to the above three, there is widespread use of patient experience indicators. Patient experience indicators provide feedback on patients’ experiences of care. Measuring patients’ experience is important as it captures the idea that good health care should be patient-centred. Patient experience indicators can be used to complement clinical information, and to gain an understanding of structure, process or outcomes.

17. There is a wide consensus backed by empirical evidence that quality measurement and reporting improves health outcomes. The mechanism from measurement to improvement in outcomes entails: (a) the collection of high-quality clinical process and outcome data, (b) identification of variations in health outcomes and differences in clinical practice at clinic, regional and national level, (c) in-depth analysis of causes in clinical outcomes variations to identify adherence to best practice and to enhance best practice, and (d) active dissemination of best practice standards and support of practitioners to enable adoption of best clinical practice. In a competition based provider system, quality will be included as a choice variable

---


\(^9\) Ibid.
for consumers and as a strategic variable when funders contracts with providers. This is to incentivise providers to compete on value for money and this will result in improved outcomes for patients.

C. POLICY AND LEGAL CONTEXT IN THE SA PRIVATE HEALTHCARE SECTOR

18. The provision of quality health services is an important priority for the South African government as reflected in several policy documents. These include the National Development Plan, the National Health Insurance White Paper, the National Department of Health’s mission and vision, the outcome of a consultative conference on health which was facilitated by the Development Bank of Southern Africa and the National Department of Health’s policy document titled “A POLICY ON QUALITY IN HEALTH CARE FOR SOUTH AFRICA”. The key aim of this policy document was to provide a way to improve quality of care in both the public and private sectors. According to the Policy, this requires measurement of the gap between standards and actual quality and finding ways to close the gap.

19. The importance of measurement and reporting of quality indicators to improve healthcare outcomes is generally recognised in South Africa’s policy documents. The policy documents, however, have not been translated into action of implementing a quality measurement and reporting system. An exception to this is the establishment of the Office of Health Standards Compliance (OHSC). However, it is notable that even the role of the OHSC is not strictly quality measurement and reporting but inspection of compliance with prescribed norms and standards. And furthermore, it appears that the role of the OHSC in the private sector is being questioned by many stakeholders.

20. The current regulatory landscape is also important to consider at this stage. The relevant laws that apply to the collection and dissemination of information on the measure of quality can include the Constitution, the Promotion of Access to Information Act (PAIA), the Health Professions Act and the National Health Act, to name a few.

21. To illustrate, section 32 of the Constitution states that everyone has a right of access to any information held by another person that is required for the exercise or protection of rights (such as the right contained in section 27 of the Constitution to have access to healthcare services). Section 32 further states that national legislation must be enacted to give effect to this right.

22. The PAIA was promulgated to give effect to this right. However, the PAIA applies to recorded information. This means that a party can sidestep another party’s right to information by not recording the information. Currently, healthcare providers are generally not required to record any information regarding the outcomes of healthcare services. Therefore, the disclosure of such information will not be enforceable via the PAIA. The information that providers have on outcomes and other quality measures is sparse as is often not collected in a standardised form across the industry. Therefore, even a mandate to record information that providers are aware of may not substantially change things.

23. Section 53(1) of the Health Professions Act requires health professionals to inform consumers of the fee that will be chargeable before health services are rendered. This Act does not mandate health professionals to provide information on quality or outcomes of patients previously treated, notwithstanding the many complaints received by the Health Professions Council of South Africa (HPCSA) relating to the quality of care, insufficient care, treatment and mismanagement of patients.

24. Furthermore, both the Health Profession Act and HPCSA Ethical Rules place restrictions on advertising and prevent touting. While such rules are said to be in place to protect the public from misleading information and unprofessional service, the concern is that they may also prevent health practitioners from competing, particularly on outcomes. Information on outcomes is more relevant if it enables comparison of quality from multiple providers. Such comparison might be more effective if there is a body that mediates to facilitate the collection, standardisation and dissemination of quality information.

25. Section 6 of the National Health Act states that healthcare providers must inform consumers of their health status, the range of options available to the consumer, the pros and cons related to each option and the consumer’s refusal right. Section 74(1) of the same Act requires the National Department of Health to facilitate and coordinate the establishment, implementation and maintenance of the health information systems by provincial departments, district health councils, municipalities and the private health sector. This will help towards reducing the fragmentation of information in the healthcare system. However, it may not solve the problem of the lack of information if the information does not exist, and it does not require providers to make available such information.

26. While the objective of improved quality and outcomes can be construed from policy and legislation, little exists in relation to the collection and dissemination of quality measure and indicators. The HMI has however noted several initiatives that have been introduced in the private healthcare sector, by various stakeholders (including facilities, funders and
practitioners). These initiatives, however, are largely for the internal purposes of these organisations. The measurements are not patient-centred and based on rigorous patient involvement, and since these stakeholders largely work on their own, the results are also not comparable and are generally not made available to the public. However, these can provide some lessons and illustrate the results of the registration of outcome measures as well as other measures of quality.

D. INTRODUCING OUTCOME MEASUREMENT AND REPORTING FOR SOUTH AFRICA

i. Outcomes measurement as an end goal

27. Outcomes measurement and reporting are important in that it promotes appropriate competition which in turn results in better outcomes. The availability of outcome indicators allows providers to meaningful peer review results of their work and improve performance. Furthermore, it allows consumers and funders to compare providers on outcomes.

28. Healthcare outcomes, that is improvements in health and functioning as experienced by the patient, are what really matters, structure and process measures matter in so far as they result in better outcomes. Given that outcome, indicators are the most useful and the need to minimise the provider cost of collecting data the HMI would put forward a proposal that the focus in the healthcare sector should be on collecting information on outcome indicators.

29. Having considered a number of examples from other jurisdictions, the HMI noted the model used by International Consortium for Health Outcomes Measurement (ICHOM). ICHOM ‘organizes global teams of physician leaders, outcomes researchers and patient advocates to define Standard Sets of outcomes per medical condition, and then drives adoption to enable healthcare providers globally to compare, learn, and improve’\(^\text{11}\). ICHOM currently has standard sets for 21 conditions and is working on 10 more conditions.

30. In selecting indicators consideration should be given to the usefulness of such indicators. Outcome measurement and reporting require the submission of data by providers which is costly in terms of financial, human and other related resources. Therefore, a balance must be struck between collecting useful indicators and not imposing too much compliance cost on providers.

31. In the long run, public reporting and rewards for better outcomes should incentivise providers to engage in broader approaches for quality and outcomes improvement. Outcome measurement, based on the rigorous involvement of patients – both at the stage of defining outcome measures and in the stage of collecting information – is the goal. Understanding the challenges that exist in getting such a system in place, a stepwise approach may be necessary. Before South African can get the desired outcomes measured approach, structural and process measures can still be useful in the interim.

ii. Independent statutory body

32. Various stakeholders have told the HMI that they would prefer an independent statutory body to be responsible for creating outcome indicators, collecting data, auditing, standardising and publishing it. They also prefer mandatory submission of quality data to the statutory body\(^{12}\).

33. The independence model of governance is often used when creating regulators such as the Competition Commission and the Council for Medical Schemes. It is also used by institutions that provide information to the public such as Statistics South Africa and the South African Reserve Bank. The primary reason for independence is to insulate the daily operations and decisions of the regulatory entity from day-to-day political considerations\(^{13}\). It is important for relevant stakeholders to have trust in the credibility of the outcomes measurement and reporting organisation (OMRO). An independent organisation is more likely to earn credibility compared to one that is not independent.

34. The HMI is considering the option of recommending the creation of an independent statutory organisation that will be responsible for outcomes measurement and reporting. Independence requires the OMRO to be able to make operational decisions without prior approval of private stakeholders or any government entity. It must however also not operate in isolation; the organisation needs the full cooperation and involvement in advisory roles of key-private stakeholders and central government. And it must be fully transparent and accountable to these structures for any of its decisions.

35. The OMRO as currently envisaged must have organisationally independence, financial independence and management independence. Organisational independence means that the OMRO must be organisationally separate from the government or the private sector. It requires

\(^{12}\) Health Market Inquiry’s public hearing held on the 10\(^{th}\) and 11\(^{th}\) of March 2016 as an example.

the OMRO to be created by primary law, rather than by a decree or other subsidiary legislation. Its powers, functions, executive organisational structure and funding should be clearly set out in the primary law.

36. Financial independence means that the level of funding should not depend directly on the associated industry (the private healthcare sector in this case) or the Government. This is operationalised by having the private healthcare stakeholder pay levies or funds from the State to come through Parliament. Management independence means that the executive and staff of the OMRO should have autonomy over the internal administration and should be protected from dismissal without due cause.

37. Independence does not mean that the primary stakeholders, i.e. patients, practitioners, facilities and funders are not involved. On the contrary. The operational structure of the organisation must be such that all professional know how of these primary stakeholders is duly secured in its structures.

38. Also, it must be recognised that government bears a responsibility for the proper functioning of the healthcare sector and as such has a role to play at the strategic level of the outcomes measurement and reporting system. Government's involvement should however not extend to the daily operation of the OMRO, nor to its management and consultative structures.

39. Government is primarily responsible for healthcare policy and the OMRO will be responsible for implementing policies and objectives that are set by the Government. Roles and responsibilities of the OMRO should be clearly defined in law, this should include how and to who it will account. Independence is difficult to achieve if the roles and responsibilities of the OMRO are unclear or ill-defined.

iii. Mandatory provision of data

40. One of the success factors of an outcomes measurement and reporting system is comprehensive data. This requires sufficient participation by providers and the inclusion of a sufficiently high number of patients. Under a voluntary reporting system, parties might look at one another and not participate. This may result in under reporting thus making the data less comprehensive. Underreporting, in turn, may result in unreliable estimates of the quality of healthcare.

41. The HMI is considering a recommendation for mandatory provision of outcomes data by providers to the OMRO. It should be made clear in the legislation that the OMRO has powers to collect patient data from providers. The HMI, however, recognises that the outcome
measurement and reporting system will only succeed if there is sufficient cooperation from healthcare providers from the first day, preferably on a voluntary basis. It may require that the statutory powers of the organisations are also introduced in a staged manner to allow voluntary participation at the beginning, followed by mandating provisions in later years.

42. A statutory body will require the development of the relevant statute which takes time to develop and pass. Even after the statute has been developed, there can be a long time lag before the relevant body starts operating. For example, the OHSC was statutorily established in 2003, it, however, became operational as an independent body more than 10 years later in 2015. Therefore, one drawback of a new statutory body is that it will take time to develop the relevant legislation and there is also a time lag between the finalisation of legislation and getting the body to start operating. The HMI, therefore, emphasises that it is imperative that key-stakeholders are involved as from the outset of a voluntary – possibly experimental process of outcomes measurement and reporting until the processes have been tested and the statutory body is established and starts to operate.

iv. Reporting to the public

43. The data collected by the OMRO should ultimately be shared with the public. The OMRO should, however, start with collecting data from providers, audit, clean and risk-adjust the data to derive comparable, standardised outcome measures for internal purposes only. Comparing clinical outcomes is a highly complex and sensitive process; only after some years of collecting, analysing, testing and reviewing the outcomes by key-stakeholders internally, the results may be shared wider with patients/members and funders. The data should ultimately be made available to the public at a provider level so that the public can be able to compare provider performance.

44. It has internationally been shown that sharing outcomes data with providers themselves, initially results in significant improvement in outcomes and cost-effectiveness. However, experience also shows that results are higher when the data is also shared with the public\(^\text{14}\). Transparency on clinical outcomes encourages and facilitates the adoption of best clinical

practices which is necessary to improve health outcomes. It also empowers consumers by enabling them to make more informed decisions regarding their choice of healthcare.

v. Staged implementation

45. The framework for outcomes measurement should follow a staged process with short and medium term goals. The discussion below outlines short and medium term goals for the outcomes measurement and reporting system.

46. Short term (3 – 4 years from January 2018):

46.1. One of the key factors of successful outcomes measurement and reporting systems is active participation of the clinical community. Therefore, any efforts aimed at creating an outcome measurement system must win the support of the clinical community. This requires devising strategies that will help to get clinicians behind outcomes measurement initiatives.

46.2. Relevant stakeholders (facilities, practitioners and practitioner groups, patient representative groups, funders) should create a collaborative body to be used for developing a voluntary outcomes measurement and reporting system. The primary aim of the movement should be to develop a voluntary quality measurement and reporting system.

46.3. The setup of the body could resemble that of the Dutch Institute for Clinical Auditing (DICA). DICA is a body that facilitates collaboration around health outcomes measurement and reporting in the Netherlands. The organisation maintains 19 national registries covering a range of medical conditions such as breast cancer and spinal surgery. It includes professionals from a wide range of disciplines such as analytics, clinical medicine, information technology, administration and law. DICA follows a process outlined below in forming a registry, measuring and disseminating outcomes data.

   a) DICA and the condition-specific professional medical society agree to collaborate on outcomes measurement and reporting.

   b) DICA and the condition specific professional medical society form a Scientific Board of clinicians and methodologists to develop a dataset for measurement by participating hospitals.

c) DICA facilitates measurement at provider sites and the professional medical society advocates measurement of the dataset to its clinicians across the Netherlands.

d) Participating hospitals submit their data to the registry. Once the data is submitted, DICA analyses, risk adjust and reports it back to the participating hospitals and professional medical society.

46.4. The body should, therefore, identify specific conditions for outcome measurement and reporting. For each condition, the body must come up with outcome indicators that will be used to measure the performance of providers. For each condition, the process must involve clinicians with expertise in that condition and if possible a condition specific medical association.

46.5. There are international organisations such as ICHOM and the AHRQ that develop outcome indicators. The body can use indicators that have been developed by these organisations and possibly test and adapt them to the local setting. Therefore, it would not need to come up with completely new indicators.

46.6. Indicators that have been agreed upon, can, for instance, be tested in a sample of hospitals from each facility group. Results and experiences from the collaborative body should then be used as an input towards developing the OMRO as discussed above. They can also be used internally by providers to promote adoption of best practices.

46.7. In the short term, the data must be shown only to the providers that participate. Each provider can receive its own data together with a national aggregate. Each provider can also receive anonymised results of other providers, particularly the top performing ones. This will help individual providers to benchmark their performance against the aggregate and against top performing providers in the country.

46.8. The sharing of results initially with practitioner and facilities will help assess if the voluntary system is working effectively. If there are important areas of improvement and differences, they should be resolved within this initial period.

47. **Medium term:10 years from January 2018:**

47.1. The medium-term goals should be to formalise the outcome measurement and reporting system which should include finalisation of the legal framework, establishment of a formal organisation that will be responsible for outcome measurement and reporting and incorporating quality in reimbursement contracts between medical schemes and providers.
47.2. The legal framework should establish the OMRO. The functions, powers, governance structure and funding of the organisation should be clearly explained in the legal framework. The development of a legal framework should be undertaken by the National Department of Health in consultation with the relevant stakeholders.

47.3. In addition to creating the legal framework, Government (through the National Department of Health) should help in funding outcome measurement efforts, particularly in the initial years. It should also help with the political and other support that may be necessary to drive the development of outcome measurement. It is important however for the government to be less involved in the daily operations of the OMRO.

47.4. In many jurisdictions, clinical societies and/or accreditation boards similar to the College of Medicine or various societies have taken the lead in collecting data on quality and leading quality improvement initiatives. The role of such institutions in South Africa, in particular for specialists, the Colleges of Medicine may have a role to play. As in some jurisdictions continued registration as a specialist could be dependent on a requirement to report outcome data.

47.5. The results can be used by facilities and practitioners to identify and disseminate best practices. This can be done annually after the OMRO has released its results. In order to promote transparency and to win support from the clinical community, the OMRO must invite the clinical community to the presentation of its annual results. The identification of best practices should help providers that are underperforming to improve their own relative performance.

47.6. At some point within the medium term, the data collected by the OMRO should be shared with the general public. This is to enable value-based competition in the system. The Council for Medical Scheme (CMS) should encourage funders to incorporate healthcare outcomes when contracting with providers, the incorporation of outcomes in contracts should occur within the medium term.

vi. Relationship with the public sector

48. The National Health Insurance (NHI) aims to provide patients with access to quality healthcare in any facility regardless of their ability to pay. The NHI will contract with facilities that meet nationally approved minimal quality and safety standards as set by the OHSC\textsuperscript{15}. The mandate

of the OHSC differs fundamentally from the mandate of the proposed OMRO. The OHSC’s mandate relates to ensuring that the provision of healthcare does comply with necessary healthcare standards. The new organisation will be responsible for transparency of healthcare outcomes across the full spectrum of healthcare. Primarily to empower the patients. Second, to improve choice processes and incentivise providers and funders to compete on the right parameters of care.

49. However, given that the NHI in future will contract with both public and private facilities it is necessary that both sets of facilities be subjected to similar outcome standards and registration requirements. The HMI, therefore, proposes that the requirement of outcomes measurement and reporting at some time be extended to public facilities when the NHI becomes fully operational.

vii. Funding

50. Consideration should be given to how the OMRO will be financed. The source of funding should be stable, reliable and sustainable. There are four funding models that can be used: government funding, levies, voluntary funding and a hybrid funding model. Whichever funding model is chosen it is important to ensure that the OMRO is adequately funded to enable it to meet all its responsibilities.

51. Government funding – government funding is more predictable and sustainable. The experience of Sweden shows that government played a big role in funding quality measurement and reporting. The downside of government funding is that it may undermine the independence of the OMRO. This is particularly the case if the line Ministry can directly influence the amount of funding. It may, therefore, be preferable that the funding is allocated through Parliament and for the body to apply directly to Parliament if it requires additional funds.

52. Levies - the source of finance through levies, rather than the government, is considered to be an important measure of independence\textsuperscript{16}. Levies should be assessed as a percentage of medical scheme contributions. An alternative is to assess levies on the revenues of providers. The former is administratively better as there are fewer medical schemes compared to providers.

53. Voluntary funding – another source of funding could be voluntary contributions from philanthropic organisations, corporates or from players in healthcare. When it comes to contributions from players in healthcare it is important to ensure that they don’t come with conditions that can affect the credibility of the body responsible for outcomes measurement and reporting. This source of funding is less reliable because it depends on the generosity of agents who are not compelled to give out such funds.

54. Hybrid funding – another possible source of funding is a hybrid model which combines any of the above three. A hybrid model is used by many organisations in South Africa, for example, the CMS and the National Energy Regulator of South Africa (NERSA). Using the CMS as an example we look at the composition of the hybrid model. In terms of the Medical Schemes Act, the funds of the CMS shall consist of: (a) appropriations from Parliament, (b) fees raised for services rendered, (c) penalties, (d) interest on overdue fees and penalties. A large part of CMS’s funds come from levies\(^\text{17}\) followed by accreditation fees\(^\text{18}\). In the 2015/16 financial year levies accounted for 90% of funds received by the CMS while accreditation fees accounted for 5%\(^\text{19}\).

55. As an example of a funding option for an outcomes measurement and reporting initiative, the HMI considered the model used by DICA:

55.1. Funding for each DICA registry is divided into two phases over three years: the Pilot Phase in the first two years and the Structural Phase in the third year. The Pilot Phase involves defining the dataset and initial implementation, and the Structural Phase involves ongoing measurement and reporting.

55.2. Each individual hospital participating in a registry must make its own initial investment for the Pilot Phase of developing a registry. Once the registry enters the Structural Phase, payers bear the costs of data collection. In the Structural Phase, funders pay 33 Euros per patient, the costs of measurement are embedded in Diagnostic-Related Group\(^\text{20}\).

\(^{17}\) Levies are amounts paid by medical schemes based on the number of principal members.
\(^{18}\) Accreditation fees are fixed tariffs paid over 2 years by administrators, managed care organisations, and brokers.
\(^{19}\) Council for Medical Schemes, Annual Report 2015/16.
E. **CALL FOR SUBMISSIONS**

56. The HMI wants to use this opportunity to request stakeholders to make submissions specifically in relation to the proposed recommendations made in this document. Stakeholders are also welcome to provide the HMI with alternative recommendations, provided they are accompanied by appropriate research and justification.

57. The HMI aims to host a seminar to discuss the recommendations should it deem this to be necessary after receiving submissions from stakeholders. If the HMI does proceed with hosting a seminar, a notice will be issued to all stakeholders, and an invitation for participation will be sent to relevant stakeholders.

58. Provide all submissions to the HMI by close of business on **18 September 2017**.
### APPENDIX

**Table A1: examples of structure, process and outcome indicators**

<table>
<thead>
<tr>
<th>Structure</th>
<th>Process</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevention of surgical wound infection: does the hospital have guidelines or protocol for antibiotic prophylaxis in surgery?</td>
<td>Metabolism and nutrition: percentage of patients with enteral nutrition correctly monitored.</td>
<td>30-day mortality after admission to hospital for Acute Myocardial Infarction (rate per 100).</td>
</tr>
<tr>
<td>Identification of high-alert medications: does the hospital have norms on special labelling and storage of high-alert medications.</td>
<td>Advanced chronic kidney disease (CKD): percent of patients treated with an erythropoietin or analogue</td>
<td>Percentage of patients age 18 years and older admitted to hospital with an injury diagnosis who die</td>
</tr>
<tr>
<td>Nurse staffing levels: does the hospital have specific rules on nurse staffing levels.</td>
<td>Routine prenatal care: percentage of patients who receive counselling and education at each visit as outlined in the guideline</td>
<td>Percentage of in-hospital deaths per 1000 discharges with pancreatic resection, ages 18 years and older.</td>
</tr>
<tr>
<td>Hand washing: does the hospital have appropriate infrastructure for hand washing in all units of the hospital in which patient care is administered.</td>
<td>Median time from arrival in emergency department to transfer to another facility for acute coronary intervention in AMI patients.</td>
<td>Urinary incontinence (UI): percentage of patients experiencing complications because of an indwelling catheter.</td>
</tr>
<tr>
<td>Availability of pharmacist: does the hospital have pharmacists available 24 hours a day?</td>
<td>Percentage of patients aged 18 years and older with a diagnosis and foot ulcer who were prescribed an appropriate method of offloading.</td>
<td>Hip functional status: mean change score in hip functional status of patients with hip impairments receiving physical rehabilitation.</td>
</tr>
<tr>
<td>Pancreatic cancer: does the institution that performs pancreatic cancer surgery have retrograde cholangiopancreatography (ECRP) services available on site</td>
<td>Percentage of patients newly diagnosed with cancer who had an assessment of the presence or absence of fatigue</td>
<td>Spinal surgery: average change between lumbar spinal fusion pre-operative and one year (9 to 15 months) post-operative leg pain as measured with the visual analog scale (VAS) for pain.</td>
</tr>
</tbody>
</table>

---

<table>
<thead>
<tr>
<th>Prevention of pressure ulcers: does the hospital have rules or protocols for prevention of pressure ulcers?</th>
<th>Diagnosis and treatment of osteoporosis: percentage of patients who were found to be at risk for bone loss or fractures who had bone densitometry</th>
<th>Cataracts: percentage of patients 18 years and older who had cataract surgery and had improvement in visual function achieved within 90 days after the surgery.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICU palliative care: presence of room designated for meetings between clinicians and ICU families.</td>
<td>Diagnosis and treatment of ischemic stroke: percentage of tPA non-recipients who have hypertension appropriately managed in the first 48 hours of hospitalisation or until neurologically stable.</td>
<td>General orthopaedic impairment functional health status: change in mean score in physical functional health status of patients receiving physical rehabilitation.</td>
</tr>
</tbody>
</table>