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Measuring health system performance: A new approach to accountability and quality improvement in New Zealand☆

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ABSTRACT

In February 2014, the New Zealand Ministry of Health released a new framework for measuring the performance of the New Zealand health system. The two key aims are to strengthen accountability to taxpayers and to lift the performance of the system's component parts using a 'whole-of-system' approach to performance measurement. Development of this new framework – called the Integrated Performance and Incentive Framework (IPIF) – was stimulated by a need for a performance management framework which reflects the health system as a whole, which encourages primary and secondary providers to work towards the same end, and which incorporates the needs and priorities of local communities. Measures within the IPIF will be set at two levels: the system level, where measures are set nationally, and the local district level, where measures which contribute towards the system level indicators will be selected by local health alliances. In the first year, the framework applies only at the system level and only to primary health care services. It will continue to be developed over time and will gradually be extended to cover a wide range of health and disability services. The success of the IPIF in improving health sector performance depends crucially on the willingness of health sector personnel to engage closely with the measurement process.

1. Introduction

New Zealand, like most other countries with publicly funded health systems, has in place a process for assessing the overall performance of the health system, together with a number of programmes for measuring the performance of the major organisations within it [1–3]. However the various instruments for measuring the performance of different organisations within the sector have evolved over time. They are often not strategically aligned with each other and do not always reflect the current direction and vision of national health policies. In February 2014, the New Zealand Ministry of Health released the recommendations of an Expert Advisory Group (EAG) which outlined a new framework for measuring the performance of the New Zealand health system and for improving the quality of services within it [4]. In essence, the framework is a set of linked performance indicators which apply to organisations within the system as well as to the system as a whole. Implementation of the framework – called the Integrated Performance and Incentive Framework (IPIF) – commenced in July 2014.

The first year is a transition year in which the framework applies only to primary health care services and includes only five high level indicators (called 'system measures')

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Table 1
The five system level measures, targets and funding which apply in 2014/15.

Measure[a]	Target	Proportion of funding[b]
More heart and diabetes checks	90% of eligible population	25%
Better help for smokers to quit	90% of smokers	25%
Increased immunisation rates for infants aged 8 months	95% of infants	15%
Increased immunisation rates for infants aged 2 years	95% of infants	10%
Cervical screening	80% of women aged 20–70 yrs	25%

Source: Ministry of Health. Integrated performance and incentive framework sector update – June 2014. Wellington; June 2014.

[a] Full details of these measures can be found at: Ministry of Health. Health targets. Wellington: Ministry of Health. Available at: http://www.moh.govt.nz/healthtargets.

[b] Proportion of allocated funding to be paid to PHOs and GPs which reach the system level targets.

which are set nationally (Table 1). From July 2015, a wider set of system measures will apply. In addition, each district will be required to choose a set of 'contributory measures' which applies to local providers and which contributes towards the achievement of the system measures. The framework will continue to be developed and phased in over a number of years and will gradually be extended to cover a wide range of health and disability services including aged care, maternity services and pharmacy.

2. Purpose of the Integrated Performance Incentive Framework (IPIF)

The overall goal of the IPIF is to support the health system in addressing access, equity, quality, safety and cost of health services [4]. The framework has two key aims. First, it aims to improve accountability to taxpayers by measuring the performance of the system as a whole. Second, the IPIF is a quality improvement programme which aims to lift the performance of the organisations within the system.

The need to develop a new performance framework was stimulated by a number of factors. In New Zealand, tax funding is devolved to 20 District Health Boards (DHBs) which purchase and/or provide health and (some) social care services for their geographically defined populations. The DHBs provide secondary and tertiary services in their public hospitals but purchase most community-based services from private (for-profit or not-for-profit) providers. This includes contracting for primary health services, the majority of funding for which is channelled through about 30 networks of general practitioners (GPs) and other providers called Primary Health Organisations (PHOs). A key focus of government strategy in recent years has been to shift services which were previously provided in a hospital setting into the community [5]. However, two separate programmes were in place for assessing the performance of DHBs and PHOs [2,3]. Although neither of these programmes has been rigorously evaluated, both appear to have made positive contributions to lifting health sector performance [6–8]. Nevertheless, there is a need for a performance management framework which reflects the system as a whole and which encourages primary and secondary providers to work towards the same end.

Related to this has been the shift towards service integration with different providers increasingly sharing practices and processes such as patient pathways, patient information and sometimes a strategic direction. A common performance management system has the potential to promote efficiency by facilitating collaboration between these related providers [9].

Another strategic direction of health policy and practice in recent years has been towards increasing the responsiveness of the system towards the needs and preferences of patients so that the system is 'people-centred' [10]. The new framework aims to reflect this principle by incorporating the needs and priorities of local communities and by including patient-reported measures of their experiences.

3. Design of the IPIF

In line with many other countries, New Zealand health policy has increasingly been aligned according to an adaption of the "Triple Aim" approach to health system development [11,12]. The performance measures will therefore be organised around the three triple aim domains of: improving health and equity for all populations; getting greater value for public health resources; and improving the quality, safety and experience of care [4]. The framework also incorporates a life cycle approach in which, where appropriate, performance measures are related to the different stages of life: i.e. infancy, childhood, adolescence, adulthood and later life (Fig. 1).

Measures within the IPIF will be set at two levels: the system level, where measures are set nationally, and the local district level, where contributory measures will be selected by local alliances between DHBs, PHOs and other key stakeholders. The idea is that, for each system level measure, each district must select from a common library a set of contributory measures that contributes to the system level measure, meets the needs and priorities of their local community, and is agreed by a local alliance of professional and community representatives. For example, a system level measure may aim to reduce adverse events while potential contributory measures might include reducing hospital acquired infections or increasing medication management in pharmacies and general practice [13]. System level measures will apply equally to all districts and will include targets against which overall performance can be measured. In contrast, contributory measures will be used to measure quality improvement within and across local organisations and practices. The process of monitoring changes in system level and contributory measures will be undertaken by a range of different methods including annual reporting requirements, monitoring of contractual agreements, audit, surveys, self-assessment and peer review.

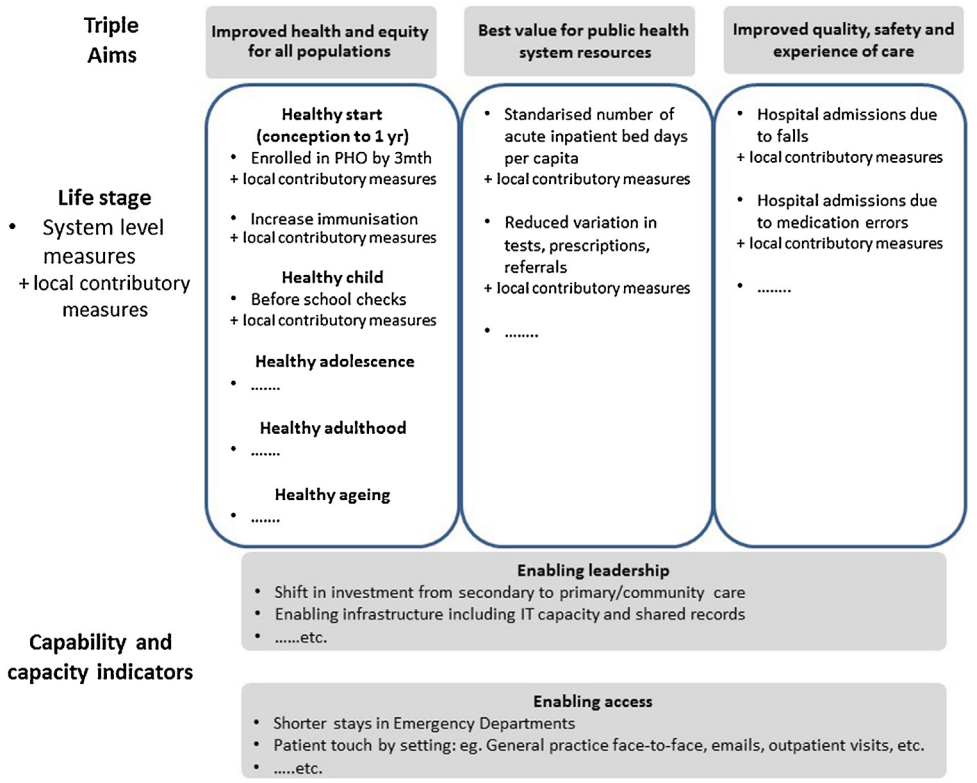

Fig. 1. IPIF framework: levels of performance measurement, with examples of possible indicators. Examples of possible measures are given here: selection of actual measures has yet to be finalised beyond the five system measures for 2014/15 given in Table 1.
Source: Based upon Expert Advisory Group. Integrated performance and incentive framework: final report. Wellington: Ministry of Health, 2014, p. 7.

Underpinning the system level and contributory measures are a set of indicators designed to monitor changes in capacity and capability of the health sector overall (Fig. 1). Examples include: changes in the share of expenditure between primary/community and secondary care; measurement of resource utilisation, including workforce and IT capacity; and development of programmes for managing variations in referrals and prescribing.

The EAG recommended that there should be four levels of achievement within the IPIF – entry, improvement, excellence and breakthrough – with movement between the levels being determined by the achievement of specified target thresholds for each of the system level measures along with other measures of quality for the various participating organisations. For example, general practices at the entry level will be required to meet the Foundation Standard that has been developed by the Royal New Zealand College of General Practitioners [14]. While the first three levels of achievement will apply to the performance of GPs, PHOs and DHBs, the breakthrough level will apply to districts that have demonstrated a high level of achievement across all service providers. The intention is to change the target thresholds at each level over time in order to encourage continuing improvement across the sector whilst rewarding providers and districts for achievement of the thresholds.

The system will include a range of financial and non-financial incentives to encourage both individual health professionals and organisations to strive for a higher level of achievement. Money that was previously used to incentivise PHO performance (NZ$23m in 2014) will be reallocated to pay PHOs and general practices which meet the system level measures and targets (Table 1) [15]. Previously, there was no requirement for PHOs to pass any performance payments that they received on to GPs (although many chose to do so). Under the new PHO contract, PHOs must pass on at least 50% of the quarterly performance payments directly to their contracted providers [16]. Hence GPs now have some financial incentive to meet the system level targets.

In addition to these financial incentives, a number of non-financial incentives are expected to influence the behaviour of both professionals and organisations [4, p. 11]. All measures will be reported publically and so the reputation of high performing PHOs and DHBs will be enhanced. The more effective are local alliances, the greater their opportunity to influence health sector decision-making. Once districts achieve the breakthrough level of performance, they will be able to negotiate variations to national health policies. Individual providers will also benefit from achieving high levels of performance. For example, in order to achieve excellence, DHBs and PHOs must have systems in place which ensure that GPs have rapid access to radiology and diagnostic services, needs assessment services and specialist advice.

4. Principles underpinning the IPIF

A number of principles guided the development of the new framework. A principle of equity is reflected in the life cycle approach which is designed to ensure that any incentives to improve quality associated with the IPIF apply equally to the different services that are used by people as they progress through life. Equity is similarly reflected in the requirement that the framework incorporates measures that can be disaggregated by ethnicity and socio-economic status. Equity is a key component of quality and separate measures for disadvantaged groups should highlight any inequities that require attention.

Another key principle underpinning the IPIF is that introduction of the new system should create as little disruption in the sector as possible. Amongst other things, this implies incorporating existing measures of performance into the new framework, at least initially. Since 2007/08, the government has placed strong emphasis on a set of national health targets, of which there currently are six (i.e. shorter stays in emergency departments, improved access to elective surgery, shorter waits for cancer treatment, increased immunisation, better help for smokers to quit, and more heart and diabetes checks) [17]. The performance of each DHB is currently measured against each of these targets on a quarterly basis. To minimise disruption, three of these six targets have been incorporated into the five system level measures of performance which apply to PHOs and GPs in the first year (Table 1). Thus, measures of performance for primary health services are being strategically aligned with the performance measures that already apply to DHBs.

Another principle that has guided IPIF development is transparency. This includes both the transparency of the decision-making process as well as transparency of the performance measures. In line with this principle, the Ministry of Health has been publishing regular updates of the work of the IPIF development teams [18]. The performance measures themselves will also be published regularly. Such transparency is essential if the general public are to make informed choices or exert pressure on providers to lift their performance. Transparency of the measures also ensures that providers have an incentive to improve or maintain the quality and efficiency of their services.

5. The policy making process

Development of the IPIF commenced in late 2012 with the appointment by the Minister of Health of the 7-member EAG which included representation from general practice, PHOs, DHBs and the Māori population. The EAG were charged with identifying the principles and concepts which would underpin the IPIF, along with development of the broad structure, design, initial measures, and governance arrangements. The group invited submissions from consumers, providers and other interested parties, held several workshops throughout the country and conducted web-based surveys. Their aim was to engage key stakeholders throughout the development period. The final EAG report released in February 2014 was promoted as a "co-production by the Ministry and the wider health sector" [19], emphasising the notion that the design and implementation of the IPIF is a collaboration between the Ministry and the sector. Six work streams have been identified, each with co-leads from the Ministry and the sector, and a Joint Project Steering Group has been appointed with membership including clinical expertise (in both general practice and hospital services), management, contracting, performance monitoring and policy [19].

Local alliances of sector representatives are central to the development and implementation of the IPIF. Since 2013, DHBs and PHOs have been required to form local and regional alliances to facilitate the development of more integrated models of care and to give sector leaders greater opportunity to set local priorities with respect to service development and quality improvement [20,21]. The expectation is that these alliances will form the basis for local level engagement into the ongoing development and implementation of the IPIF.

The implementation pathway is being smoothed by the phased introduction of the IPIF and by the initial selection of measures for which data are already routinely collected. While in the first year, the framework formally applies only to general practices and PHOs, the close alignment of the first five system measures to the existing DHB targets ensures that a 'whole of system' approach has already been established, with primary and secondary providers working towards similar health goals. From July 2015, additional system and contributory measures will be set across all of the life stages, along with measures of capability and capacity. Patient-reported measures will also be introduced from July 2015. As processes for information collection and analysis are further developed, the framework will be extended to a wide range of services and organisations across the health and disability system.

6. Discussion

The success of the IPIF in improving health sector performance depends crucially on the continued willingness of health sector personnel to engage closely with the measurement process. To date, the broad framework and the principles upon which it is based appear to have been generally well-received by health professionals [22–24]. However many of the finer details of the framework have yet to be developed and these are likely to be more controversial. The process is dependent upon the maintenance of a co-design approach in which the Ministry and sector representatives share in the decision-making as well as on continuing close collaboration by a range of people and organisations at both the national and local levels. As the EAG noted, this in turn relies on the successful development of local alliances together with "an environment of high trust" [4, p. 3].

There are other challenges facing the development and implementation of the IPIF. As noted above, the framework has two parallel aims: accountability and quality improvement. While the Ministry of Health wants accountability, those in the sector want 'ownership' of the quality improvement process [25]. The interests of the two parties will need to be balanced carefully and sensitively in a way that satisfies all key stakeholders.

As yet the framework does not address issues of equity directly. There are no specific indicators for population subgroups or requirements to report information separately for at-risk populations. This is of particular concern for Māori and Pacific people who experience poorer health than other New Zealanders. There is also no indication of how the framework will accommodate practices or PHOs which have a high proportion of high-needs patients and hence are less likely to meet the targets than other practices. However implementation of the IPIF is at an early stage and work is currently underway to develop an approach that addresses these equity concerns [21].

Because there is some financial reward for PHOs and GPs who reach the targets, there is inevitably a possibility of unintended effects that are associated with pay-for-performance systems. These include crowding out of those activities that are not incentivised, gaming and reducing professional motivations [26]. However, the financial payments associated with the IPIF are not large. Moreover, the framework incorporates a number of non-financial incentives that are expected to influence professional behaviour.

Finally, there are a number of potential barriers to the effectiveness of the IPIF in improving the performance of the New Zealand health system. The framework will require good information, together with sufficient analytical capacity to analyse and interpret data in the local setting. However different general practices use different patient management systems and data at the primary care level are currently not standardised. Similarly, existing funding flows are sometimes siloed and can create real disincentives to improving performance by better integration of services. While GPs have been closely engaged in the development of the IPIF, other primary health care professionals appear to have been less engaged. Yet improving performance in primary care will depend upon the buy-in of these groups, especially primary care nurses.

7. Conclusion

The IPIF provides a pathway towards the development of new performance measurement arrangements for the New Zealand health and disability system which (a) builds on and combines current performance measures (b) reflects national policies and the shift towards more integrated services (c) incorporates incentives for quality improvement, and (d) over time, should be patient-centred. Development of the system will require the continuing engagement of both providers and patients, and will meet a number of barriers. However, the intention is to introduce the system incrementally, with each phase informing the next. It is hoped that this incremental approach will encourage the development of strong local alliances which provide the leadership that will be essential for success.

Conflicts of interest

None.

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