

OCCASIONAL NOTE

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The Brazilian Primary Healthcare Delivery Model

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1 Introduction

According to the ANC¹ the primary healthcare system will be reengineered to form the core of the proposed National Health Insurance (NHI) and will serve as the first point of entry into the system. The Minister of Health, Dr. Aaron Motsoaledi, is also determined to overhaul the primary healthcare system. Earlier this year Dr. Motsoaledi and his provincial counterparts visited Brazil to investigate its primary healthcare system, which focuses on the delivery of healthcare at the community level. The Minister was reportedly impressed with what the Brazilian system has achieved, stating that it was the best method to deliver primary healthcare.² In view of this statement, this note will briefly investigate the features of the Brazilian primary healthcare system.

2 The Brazilian Primary Healthcare System

2.1 The Unified Healthcare System (SUS)

The Brazilian Unified Healthcare System (SUS) is based on three principles. Firstly, access to healthcare is universal and free at the point of use to the whole population. Secondly,

free healthcare is provided at all levels, from preventative care to complex hospital treatments. Thirdly, the funding and provision of healthcare is shared between the three tiers of government, federal, state and municipal, with an increasing trend towards managerial decentralisation. Municipalities have the responsibility for health services delivery and provision, which

Table 1: Features of the Brazilian Unified Healthcare System

Financing	Government revenue based, split between municipalities, states and federal levels. Employer contributions and out-of-pocket payments for private insurance schemes.
Benefits Package	All inclusive public sector care – including outpatient, inpatient, and dental. No copayments. For those with ability to pay, higher quality, more timely care in private sector services.
Coverage	Access for 100% of population. 25% opt out for private insurance coverage.
Payment	Capitation for primary care. Fee-for-service for higher levels of care.
Provision	Outpatient facilities primarily public. Hospitals primarily private. Public sector contracts with private providers.
Administration	MoH sets guidelines. Municipalities and state responsible for health service delivery.

1. Mthembu, J. (2010): ANC Media Statement: *The Road to National Health Insurance*. National General Council, Durban, 21st September 2010.
2. Thom, A. (2010): South Africa: PHC the Cornerstone of NHI – Minister. *allAfrica.com*, 30 September 2010, Available at: <http://allafrica.com/stories/201009300648.html>

can vary widely across states and municipalities.³ Table 1 summarises the features of the SUS.

2.2 The Family Health Programme (PSF)

The Family Health Programme (PSF) is the central pillar of the primary healthcare strategy in Brazil. The PSF is part of a shift from a model based on curative care in hospitals towards a focus on primary and preventative care, with the first point of contact shifted to local communities. The PSF has reorganised primary care to become the gatekeeper of the healthcare system and the first point of entry into a regional hierarchical system. Geographical catchment areas have been defined and made the responsibility of a specific health team. The focus of care has also been shifted from the individual to

the family.⁴ This model is potentially very relevant for developing countries, since it is relatively cheap and technologically simple and has the potential to expand access to basic healthcare to a large number of poor families. It also reduces the pressure on traditional public healthcare providers such as clinics and hospitals.⁵

The PSF provides a comprehensive range of preventive and curative healthcare through professional Family Health Teams (FHTs) placed in the communities. The FHTs consist of at least one physician, one nurse, one assistant nurse, and four to six community health workers. Certain expanded teams also include a dentist, a dental assistant and a dental hygiene technician. These professionals work full-time or 40 hours per

week and are paid differentiated salaries, as opposed to fee-for-service. The exact form of contracting and level of salary is different in each municipality, but salary incentives are provided for workers in geographically remote areas. According to the Ministry of Health each FHT is responsible for a defined catchment area consisting of approximately 1,000 families or between 3,000 and 4,500 individuals. The services are provided in family health units and in households.⁶

The family physician provides the highest level of healthcare within the FHT and is responsible for referring individuals to secondary and tertiary care. The nurse performs primary care activities and supervises the work of the other professionals. The community health workers

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3. Sparkes, S. P. and Hsiao, W. (2010): *Comparative Approaches to Health Financing in Brazil, Chile, Colombia and Mexico*. The Henry J. Kaiser Family Foundation.
4. Macinko, J., Almeida, C., Dos Santos Oliveira, C. and De Sa, P. K. (2004): *Organization And Delivery Of Primary Health Care Services In Petrópolis, Brazil*. International Journal Of Health Planning And Management; Vol. 19 (303–317).
5. Moreno-Serra, R. (2009): *Health Programme Evaluation by Propensity Score Matching: Accounting for Treatment Intensity and Health Externalities with an Application to Brazil*. Health Econometrics and Data Group: Working paper 09/05.
6. Giugliani, C. and Nascimento, D. (2007): *Brazil: Achievements and Challenges to the Health System*. IPHU Short Course – Savar – November 2007.

are the first point of contact and provide the bridge between families and health services by making monthly visits to each household in their catchment area. They also register families, collect medical histories, promote healthy lifestyles and provide preventative services. These workers are recruited from individuals that have been resident in the catchment area for at least two years, to ensure that they are familiar with the specific needs of the area. By regularly visiting families the FHTs can improve health management at home and reduce the occurrence of simpler health conditions. Regular interaction should also allow workers to detect early symptoms that might require more complex care and to refer families when necessary. Moreover, FHTs can be used to implement coordinated health interventions, such as immunisations, which could help to reduce the pressure on public hospitals.⁷

The funding for the PSF is collected by the federal government through general taxes and transferred to states and municipalities. Although

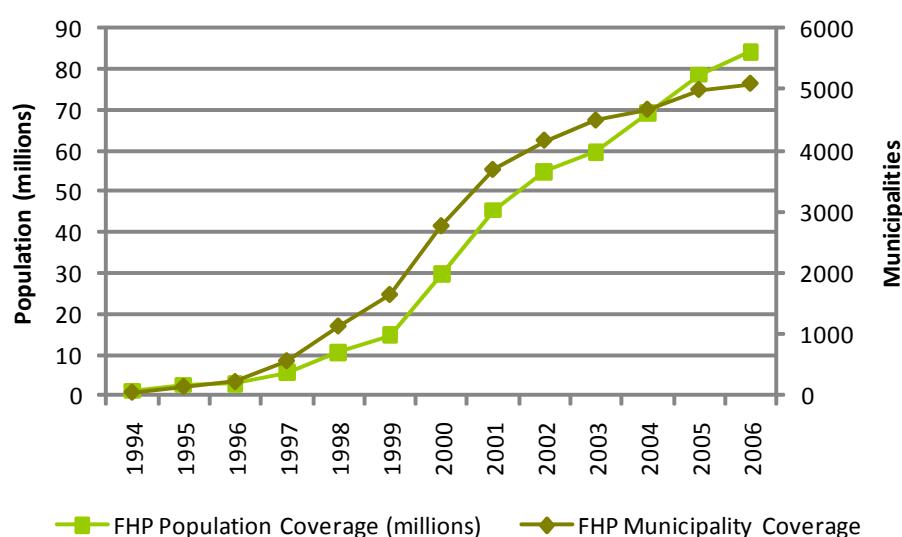
municipalities enjoy a considerable degree of autonomy in managing the PSF, they must follow federal guidelines on the activities and composition of FHTs to qualify for the transfers. In 1998 the fee-for-service funding system for primary healthcare was replaced with a capitation system known as the Basic Care Fund (PAB). According to the PAB the share of the health budget received by each municipality is calculated according to a formula with a fixed and a variable component. The fixed component is a fixed per capita transfer that guarantees an amount for basic care for all individuals.⁸

The variable component depends on the number of FHTs and the population coverage achieved in each municipality. For instance, in 2001 municipalities received R\$ 28,000 per year per FHT for coverage below 5% and R\$ 54,000 for a coverage of more than 70%. Municipalities receive an additional lump-sum payment for every newly formed FHT.⁹

2.3 The Impact of the PSF

Due to its success, the PSF has been expanding continually. It was established in 1994 with 328 teams in 55 municipalities. In 1998 it was up and running in more than 5,100 of

Figure 1: Coverage of the PSF



Source: Rocha and Soares (2010), Guigiani and Nascimento (2007).

7. Rocha, R. And Soares, R. R. (2010): *Evaluating The Impact Of Community-Based Health Interventions: Evidence From Brazil's Family Health Program*. *Health Economics*, Vol. 19 (126-158).

8. See footnote 3.

9. See footnote 5.

the 5,564 municipalities across the country, with 27,140 teams covering about 90 million people or around half of the population.¹⁰ The growth of the programme is illustrated in Figure 1. Most of the municipalities initially placed the FHTs in their poorest and unhealthiest areas, according to indicators such as the infant mortality rate. When a municipality adopts the programme, all individuals in the catchment area are automatically covered.¹¹

Preliminary evidence indicated that this increase in coverage improved health outcomes in Brazil significantly. For example, from 1990 to 2002 PSF coverage increased from 0% to 36%, while infant mortality decreased from 49.7 to 28.9 per 1,000 births over the same period. Thus, a 10% increase in PSF coverage was associated with a 4.5% decrease in

infant mortality rates, after controlling for other determinants.¹² However, it should be kept in mind that the infant mortality rate had started decreasing before the implementation of the PSF.

In a statistical study, Rocha and Soares (2010)¹³ showed that the implementation of the PSF was associated with significant reductions in mortality throughout the age distribution, but particularly at early ages. For example, they estimated that municipalities that had participated in the programme for three years reduced infant mortality by 1.8 per 1,000 births more than similar municipalities that did not participate. In municipalities participating for eight years there was a reduction of 5.4 per 1,000 births, which corresponded to 20% of the 1993 average. In general, mortality reductions increased with each additional year

of participation in the programme. The larger effects for infant mortality for a given health outcome suggested that the focus on child health had been successful. The most substantial reductions in mortality were related to perinatal conditions, infectious, endocrine and respiratory diseases, as well as external causes and digestive diseases for older age groups. The benefits of the programme were particularly large in municipalities with the worst initial conditions and in the poorest regions, i.e. the north and northeast. It is also likely that these improved health outcomes were correlated with improvements in other dimensions of household behaviour. The evidence for the poorest regions suggested that the programme was correlated with lower fertility rates, increased female labour supply and improved school enrolment.¹⁴

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10. Girardi, S. N. And Carvalho, C. L. (2008): *Trends In Labor Contracting In The Family Health Program In Brazil: A Telephone Survey*. Cah Socio Démo Méd, Vol. 48, No. 2.

11. See footnote 5.

12. See footnote 6.

13. See footnote 7.

14. See footnote 5.

3 Conclusion

According to Dr. Motsoaledi the current curative healthcare system in South Africa is expensive and unsustainable and has to be replaced by a system based on disease prevention and health promotion.¹⁵ The ANC (2010)¹⁶ envisages a reengineered primary healthcare system served by teams consisting of a doctor or clinical associate, a nurse, and three to four community health workers.

Clearly these ideas are closely related to the Brazilian PSF model.

The evidence has confirmed the importance and effectiveness of community-based healthcare in improving health outcomes in Brazil, especially in economically disadvantaged areas. However, a certain degree of institutional development will be necessary to replicate these results in other developing countries such as South Africa. In particular, the

coordination and monitoring of health teams will be essential, but administrative costs will have to be kept in check. The cost of the programme will also depend on labour market conditions and on the wages required to incentivise medical professionals to work in the relevant regions. An adequate supply of medical professionals will also be a prerequisite, particularly nurses and community health workers. This could be a major constraint in South Africa.¹⁷

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15. See footnote 2.

16. See footnote 1.

17. See footnote 7.