

The nurse practitioner provides a substantive opportunity for task substitution in primary care

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YES

This column will argue in the affirmative for the above claim by advancing four arguments:

1. Nurse practitioners (NPs) are able to substantially perform many tasks performed in primary care;
2. NPs complement the work of other primary care workers;
3. NPs are not remunerated at the same rate as other primary care workers;
4. NPs don't take as long to train as other primary care workers.

All of these arguments are premised on the assumption that the fundamental driver is to improve service user outcomes NOT to accrue more professional status or power for NPs. These arguments are also premised on the assumption that general practitioners (GPs) have a significant role to play in primary care and that 'task substitution' should be part of a collaborative process of understanding between NPs and GPs. We have also assumed that the 'task substitution' referred to is that between NPs and GPs.

1. NPs can substantially perform many tasks performed in primary care.¹ They are prepared

to assess, diagnose, prescribe interventions, order many lab and diagnostic tests, plan care and refer on to other professionals. However, it is important to note that we are discussing 'task substitution' in this context and not 'role substitution'.

GPs and NPs have different training and education. However, NPs are able to safely and effectively complete 80% of the tasks of GPs for adults in primary care and 90% of paediatric primary care needs.¹ Some might argue that GPs have more training in diagnosing and treating medical disorders pharmacologically; however, where the GPs and NPs can collaboratively agree, there is scope for NPs to perform many tasks that have traditionally been seen as only within the role of the GP.⁸ For instance, in the US where NPs have been utilised for almost 50 years and total over 125 000 practitioners, the availability of research testing these ideas and the demographic characteristics are rich:

- Approximately 6000 new NPs are prepared each year
- 88% of NPs have graduate degrees; 92% maintain national certification
- 96.5% prescribe medications
- 20% practise in rural or frontier settings; 66% in primary health care
- 62% NPs see three to four patients per hour; 12% see over five per hour



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While evidence can help inform best practice, it needs to be placed in context. There may be no evidence available or applicable for a specific patient with his or her own set of conditions, capabilities, beliefs, expectations and social circumstances. There are areas of uncertainty, ethics and aspects of care for which there is no one right answer. General practice is an art as well as a science. Quality of care also lies with the nature of the clinical relationship, with communication and with truly informed decision-making. The **BACK TO BACK** section stimulates debate, with two professionals presenting their opposing views regarding a clinical, ethical or political issue.

- In the context of the US where malpractice rates are high, NP malpractice rates remain low, with only 1.4% being named.¹

In a comparison study looking at NP and GP management of hypercholesterolemia following revascularization, results demonstrated that patients in the NP-managed group were more likely to achieve their goals and were concordant with the prescribed regimen at a decreased drug cost.²

2. NPs complement the work of other primary providers, particularly GPs. NPs have particular strength in prevention, health promotion and early intervention and working with chronic disorders. Many GPs have strengths in diagnosing and treating acute medical disorders pharmacologically. There is, consequently, scope for considerable task substitution in those areas, collaboratively agreed, where NPs have particular strengths.

A GP-NP model evaluating medical decision-making demonstrated significant cost savings when 1207 patients in an academic medical centre were randomised to either standard treatment or to a GP-NP model.³ Taking this a step further, as there is evidence that NPs offer more advice/information, have more complete documentation, and better communication skills than GPs,⁴ a collaborative team would more likely enhance the aim to improve quality health care for an ever increasingly complex patient.

3. NPs are not as expensive as GPs and hence it makes good sense to use them for substantive task substitution in those areas where they can make the most positive contribution. The median hourly cost of a NP has been estimated to be one-third to one-half the cost of a GP.¹

A study of 26 primary care practices with approximately two million visits by 206 providers determined that the labour costs per visit were lower in practices where NPs were used to a greater extent; and 23% below the average cost of other primary care providers with a 21% reduction in hospital inpatient rates and 24% lower lab utilisation rates compared to GPs.⁵ Jenkin's and Torrisi's 1995 study compared a GP-managed practice with a NP-managed practice within the

same care organisation. The NP-managed practice had 43% of the total emergency department visits, 38% of the inpatient days, and a total annualised per member monthly cost that was 50% that of the GP practice.¹

In a GP practice, adding a NP to the practice could virtually double the typical patient population seen by a GP. One of the writers' experiences at a North Island, New Zealand primary health care clinic found that the GPs were essentially fully booked for the day approximately one half-hour after the practice opened for the day. Adding a NP allowed walk-in patients to be evaluated and treated which in many cases prevented an emergency department visit, disruption to the GP-scheduled patient flow, and an unnecessary inconvenience to the patient who otherwise might have had to return the next day.

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4. NPs don't take as long to train as GPs and hence they can more speedily be recruited, particularly in areas where there are difficulties recruiting GPs. Internationally, NPs have been proven to be cost-effective providers of high-quality care⁶ and eager to care for the underserved population. The NP preparations have been estimated to cost 20–25% that of GP preparation.¹

In conclusion, substitution of GPs by NPs in primary care has been studied extensively within the primary health care setting. A meta-analysis which included 25 articles relating to 16 studies comparing outcomes of primary care nurses and GPs demonstrated that the quality of care provided by nurses was as high as that of the GPs and could be provided in a cost-effective manner. The satisfaction level of care for patients was higher with nurses. Studies included a range of care delivery models, with nurses providing first access, ongoing management, and urgent care for many of the patient groups.⁷

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NO

The moot that nurse practitioners (NPs) provide a substantive opportunity for task substitution in primary health care in New Zealand is not borne out by experience and is potentially in conflict with a fundamental objective of most health service planning, which is that primary health care and/or general scopes of practice become the usual habitat of doctors.¹ This is probably the only way in which the profession can have a rational place in future health systems. It is also a likely requisite to an outcome- and cost-effective health service.²

History is the usual best predictor of the future. The New Zealand Primary Health Care Strategy (PHCS) was introduced in 2001 and has a core of community partnership and incentive-free capitation as a means of paying general medical practitioners (GPs). Predictably, GP income has increased, workloads have decreased and referrals for investigations and to secondary and tertiary care facilities have increased, although the data for the latter are questionable. Based on respective council data, the decrease in GP capacity is

about 12.5% or the equivalent retirement of 250 GPs. The expectation was that NP-led chronic care clinics would compensate for any such decrease. There are 47 NPs in New Zealand; 15 of these are in primary health care and eight prescribe. This reality illustrates the extent to which the architects of the PHCS engaged in 'magical' thinking. In contrast to a common obsession that employment models limit NP engagement,³ qualitatively the barriers would appear to include GP and consumer attitudes, a sense amongst nurses that the required training to become a NP is onerous and time-punitive, a strong desire among nurses to maintain part-time work that accommodates their own and their family needs, and an apparent reluctance to accept roles that result in significant clinical responsibility. These qualitative hypotheses need study if New Zealand is to match the success of such schemes in the UK.³

The milieu of this debate is worrying. The WHO estimates a current global shortage of about 4.3 million health workers.² New Zealand has only 70% of the OECD per capita average for doctors and 51% of these are foreign-born.⁴ The Nobel-Laureate Robert Fogel predicts a doubling of health budgets in Western nations by 2020 and this seems a reasonable prediction for New Zea-