



Nursing in Primary Health Care (NiPHC) Program – Enhanced Nurse Clinics: A review of Australian and international models of nurse clinics in primary health care settings

A review prepared for the Australian Primary Health Care Nurses Association (APNA)

Summary

Nurse clinics or nurse-led clinics exist in a multitude of health care settings and across multiple jurisdictions, both nationally and internationally. It is important to note that there is no standardised model of nurse-led clinics, although there are some features of nurse clinics which appear to be common across a number of models.

The majority of available literature relates to nurse clinics in the tertiary health care sector, mostly associated with specialist clinics, such as oncology, and operating as an alternative to consultant-led clinics. There are, however, a number of studies that relate specifically to the primary health care sector. Examples of these nurse-led clinics are outlined in this review.

While the format of these clinics may vary, studies overwhelmingly show that nurse-led clinics result in improved health outcomes, shortened waiting times for patients and decreased rates of hospital admission. For areas of health workforce shortages and rural and remote areas with limited access to health care services nurse-led clinics can offer patients vital access to health advice and treatment.

An examination of the literature demonstrates there are various barriers and enablers for the successful implementation of nurse-led clinics. Examples of barriers include problems with IT systems/templates and resistance from other medical professionals. Examples of enablers include adequate/suitable infrastructure (clinic rooms, reception area etc.) and support from other medical professionals.

The barriers and enablers, as well as other lessons learnt from national and international nurse-led clinics, can be taken into consideration when planning the delivery of nurse clinics in the Australian primary health care environment. This includes the need for:

- a multi-disciplinary/trans-disciplinary approach
- comprehensive planning and scoping prior to implementation of the clinic;
- good administrative support; and
- support from other colleagues and health professionals.

Introduction

The pressure on Australia's primary health care services is rapidly increasing due to an ageing population, rising patient expectations and government reforms that are shifting care from hospitals to the community.¹ This increased demand for health care services is resulting in a growing burden of health care costs.

Greater use of the primary health care nursing workforce is vital if Australia is to successfully address these health issues. One of the ways in which these nurses can contribute to improved health outcomes and efficiencies is through their involvement in nurse-led clinics. Such clinics delivered in primary health care settings are an effective and efficient solution to reducing the burden of health care costs and shifting care to the more cost-effective community sector.

Increasingly, the general practice setting has been a main focal point for primary care nursing within Australia. The practice of nurse-led clinics across the broader primary health care setting is much less clearly defined, as reflected by the paucity of research and scholarship in this area. However, fuelled by the increasing challenges of workforce shortages and the increasing need for multidisciplinary care, interest in the developing role of the Australian primary health care nurse among clinicians, researchers and policy makers is now increasing.²

This literature review examines national and international examples of nurse-led clinics with a focus on nurse clinics in primary health care and the barriers and enablers for success of these clinics.

Terms and definitions

Key terms used in this document include ‘primary health care’, ‘primary health care nursing’ and ‘nurse clinic/nurse-led clinic’. These terms are defined below.

Primary health care

Primary health care is defined in the Declaration of Alma Arta as:

*...essential health care made universally accessible to individuals and families in the community by means acceptable to them, through their full participation and at a cost that the community and country can afford. It forms an integral part both of the country's health system of which it is the nucleus and of the overall social and economic development of the community.*³

Primary health care is the first level of contact that individuals, families and communities have with the health care system. In Australia, this:

- incorporates personal care with health promotion, the prevention of illness and community development;
- includes the interconnecting principles of equity, access, empowerment, community self determination and inter-sectoral collaboration; and
- encompasses an understanding of the social, economic, cultural and political determinants of health.⁴

The Australian Primary Health Care Research Institute (APHCRI) defines primary health care as:

*socially appropriate, universally accessible, scientifically sound first level care provided by health services and systems with a suitably trained workforce comprised of multi-disciplinary teams supported by integrated referral systems in a way that: gives priority to those most in need and addresses health inequalities; maximises community and individual self-reliance, participation and control; and involves collaboration and partnership with other sectors to promote public health. Comprehensive primary health care includes health promotion, illness prevention, treatment and care of the sick, community development, and advocacy and rehabilitation.*⁵

Primary health care nursing

Primary health care nursing refers to nursing that takes place within a range of primary health care settings, each sharing the characteristic that they are a part of the first level of contact with the health system. In Australia, those settings can include:

- community settings—including the community controlled health services, the community health sector and roles within social service settings
- general practice
- domiciliary settings—in the home, including residential aged care, custodial/detention settings, boarding houses and outreach to homeless people
- educational settings—including preschool, primary and secondary school, vocational and tertiary education settings
- occupational settings—occupational health and safety and workplace nursing
- informal and unstructured settings—including ad hoc roles in daily life, such as sports settings and community groups.

Nurses that work in the primary health care sector undertake work that includes the following:

- health promotion
- illness prevention
- midwifery, antenatal and postnatal care
- treatment and care of sick people
- rehabilitation and palliation
- community development
- population and public health
- education and research
- policy development and advocacy.⁶

Nurse clinic/Nurse-led clinic

A nurse-led clinic is a health care setting where a nurse is the primary provider of care and has a patient caseload. The nurse-led clinic will provide screening and detection of early disease or indicators of management of chronic disease or healthy ageing in areas of population and patient need. There is no set role for a nurse working within a nurse-led clinic—their role can be broad and comprehensive—but generally it would be taken to include dealing with:

- chronic and complex conditions
- maternal and child health
- vulnerable and disadvantaged populations.

Services commonly provided in nurse clinics are health assessments to monitor a patient's health condition and symptoms, health education to facilitate compliance and a healthy lifestyle, and coordination of care.⁷

Historically, in the acute health care sector nurse-led clinics have been used for patients who are medically stable but who still require considerable support to regain their maximum health.⁸ These clinics enable nurses to have greater responsibility over patient care, to work autonomously rather than under the direction of medical staff, and to work holistically with patients on rehabilitation, counselling and discharge planning.

The Evaluation Report of the 2014-2015 Australian Primary Health Care Nurses Association (APNA) Nursing in General Practice (NiGP) Project by Melbourne University states:

'There are multiple conceptualisations of nurse clinics. [Nurse-led care] is a continuum of practice ranging from the nurse having delegated authority to make decisions regarding patient care at one end of the spectrum, to being responsible for all care provided, including clinical assessment, treatment and management of patients undifferentiated by need. APNA defines a nurse clinic by referring to a range of parameters (e.g., accountability, responsibility, model of service provision, scope of practice, organisation arrangements etc).'(p. 59)⁹

In their 2011 study, authors Hutchison and Simpson note there are many definitions of what constitutes a nurse-led clinic.¹⁰ The same study cites Richardson and Cunliffe, who identified the common features of a nurse-led clinic as being:

- direct referral mechanisms
- assessment and technical skills
- freedom to initiate diagnostic tests

- prescription (to protocol) of medications
- increased autonomy and scope for decision making
- discharge.¹¹

General international models/studies of nurse clinics/nurse-led clinics

There is a lack of available studies on nurse-led clinics which span multiple jurisdictions. Two international studies which do cover this topic are outlined below.

In a report conducted in response to a request from the Australian Government's National Health and Hospitals Reform Commission (NHHRC) the author set out her examination of international studies of new and emerging nurse-led models of primary health care.¹² In the view of the author, future primary health care should be developed on a model of trans-disciplinary care as opposed to being led by any one professional group. Trans-disciplinary care allows for appropriate use and focus of the expertise of healthcare team professionals and allows for greater efficiency of health care provision.

An international study on the impact of nurse-led clinics on the mortality and morbidity of patients with cardiovascular diseases (CVD) concluded that nurse-led clinics can have an important role and should be considered when delivering care to patients with CVD.¹³ The study found a favourable effect of nurse-led clinics on all-cause mortality, rate of major adverse cardiac events, and adherence to medications in patients with CVD.

While there are limited general international studies, the above examples provide evidence of the benefits of trans-disciplinary/multidisciplinary care in nurse-led care, as well as the positive health outcomes in using a nurse-led clinic model.

National (Australian) models/studies of nurse clinics/nurse-led clinics

As with international examples, much of the available literature relates to Australian nurse-led clinics associated with the acute or tertiary health care sector.

A number of examples of nurse-led clinics are tied to specific conditions or disease. This includes a nurse-led clinic for female sexual dysfunction located in regional Western Australia.¹⁴ The study confirmed the value of an innovative approach to managing female sexual dysfunction in a rural area with workforce shortages and limited health services. It recommended that care by a nurse-led multidisciplinary team be used in the management of sexual dysfunction, as this was seen to be the most effective way of meeting the needs of the target client group.

Another example of an Australian nurse-led clinic relating to a specific condition is a study evaluating the effectiveness of a nurse-led memory clinic (NLMC).¹⁵ The NLMC was run by a Nurse Practitioner (NP) and provided patients with an alternative to seeing a GP or consultant. The experience of assessment by the NP was predominantly described positively. Many patients felt they would prefer to visit the NP rather than another health professional, and this was related to the perception of the nurse having time to communicate, both when listening and explaining. Ten of the 13 study participants stated they would not have made an appointment with their GP to discuss their memory concerns, with the prevailing reason being the GP's lack of time to talk. One participant was quoted as saying 'the doctor hasn't got time ... is a busy man' (pg. 26). The study concluded that the longer consultation times offered in the nurse-led clinic enabled the NP to gain a greater insight and understanding of the patient's unique perspective and provide appropriate and tailored health care.

In their article on nurse-led clinics run by Parkinson's disease registered nurses (PDRN) in the Hunter New England local health district in NSW, Gow et al. reported a number of direct benefits arising from patient participation in these clinics.¹⁶ The article confirmed the findings of a Department of Health study that showed nurse-led clinics in chronic disease management, including Parkinson's disease, can result in:

- increased patient satisfaction
- improved quality of life
- improved clinical outcomes
- increased understanding of chronic disease
- improved access to health professionals such as allied health referrals.

Authors Hegarty et al. looked at the establishment of nurse-led youth clinics in Victoria, Australia in their 2013 study published in the Australian Journal of Primary Health.¹⁷ The study reported that the clinics had a positive impact on each of the practices associated with the clinics in several ways, including encouraging greater practice dialogue about youth health issues, encouraging an all-of-practice team approach and increasing staff knowledge of youth issues. Several GPs were reported to have said that working alongside the nurses while the clinics were running had a positive impact on their professional relationship and they had a greater respect for nurse capabilities as a result of seeing them initiate, set up and run a clinic. The clinics were seen as an empowering experience for all practice staff, and the nurses involved reported an increase in their knowledge and skills as a result of running the clinics.

Despite the positive impact of the clinics, the study identified a number of obstacles encountered by the nurses when establishing and running the clinics. These centred on a general lack of support for the clinics, a lack of GP referral to the clinics, and an increase in nurse and practice staff workload.

Lack of support for the clinics was reported as the largest barrier by all nurses, and this originated mainly from GPs (including territorial issues about who is best placed to do the work) but also from external youth health service providers. The study reported that several GPs felt that the clinic had increased the nurses' workloads, and were concerned about how sustainable this was in the current pressurised general practice environment. Similarly, several practice staff that the workload of the practice staff was increased as a result of the clinics. They spoke about how they had to make an effort to keep all of the practice informed about the clinics, and in some cases change the communication methods between the primary health care nurses, practice staff and the GPs.

In its conclusions the study noted that recommendations for future clinics would include longer consultation with external stakeholders, members of the general practice team and consumers before introduction of such a nurse-led clinic model. It was also asserted that the costs of the clinics would need to be offset by clear demonstrated benefits to patient health outcomes.

In terms of general primary health care, several articles have looked at private nurse-led clinics delivering a range of primary health care services. A 2009 article discussed how a registered nurse set up a private nurse clinic located in Melbourne.¹⁸ The clinic offered various patient services such as chronic disease management, preventative health care and risk identification, wound care management, medication administration, carer support and health service advice and support. The clinic was funded privately (it didn't rely on Medicare rebates). There does not appear to be any subsequent evaluation of this clinic.

Another example is a private nurse-led clinic based in Westfield Chermside shopping centre in Queensland. As reported in a 2011 article, the clinic had plans to expand into other Westfield shopping centres across Brisbane and also to employ midwives.¹⁹ No evaluation of this Queensland-based clinic is available, and it is unknown whether the clinic was successful in its plans for expansion.

In their study of the evolution of practice nursing in Australia, Halcomb et al report that international research in both disease-specific and generic chronic care programmes has indicated that most successful primary health care nursing programmes rely on nurses either to act as case managers or to lead disease-specific clinics.²⁰ However, contemporary Australian funding models for health service delivery have been identified as significant impediment to providing such services in general practice.

A mixed-methods study published in the Australian Journal of Primary Health reported on a new model of nurse-led chronic disease management in three general practices, two in Queensland and one in Victoria.²¹ The results of this study indicated that the nurse-led model was feasible to GPs and patients, and that all GPs involved in the study noted significant advantages to the model and elected to continue with the nurse-led care after our study concluded.

Although the studies noted above do provide some evidence of the effectiveness of nurse-led clinics, there is a general lack of evidence relating to this health setting in the Australian context. Combined with lack of studies which focus on evaluation and data analysis, this makes it difficult to draw any firm conclusions on this model of care. Despite this, it is clear from the studies available that Australian examples largely reflect other international papers which outline the benefits of nurse-led clinics both to patients and nurse participants.

International models/studies of nurse clinics/nurse-led clinics – United Kingdom

Many examples of nurse-led clinics in the United Kingdom (UK) relate to specialist clinics operating within the acute setting. There are also a number of examples of nurse-led telephone ‘clinics’, such a service for patients discharged from hospital post thoracic surgery.²² This study illustrated that lung clinical nurse specialists (CNS) providing nurse-led services can free up consultant resources and empower patients with lung cancer to self-manage their condition, leading to efficiency savings and preventing costly unplanned hospital admissions.

Various UK studies have compared nurse-led clinic care with consultant-led clinic care. An example of this is a 2013 article in the journal *Nursing Standard*.²³ This article looked at the effectiveness of a nurse-led clinic versus a rheumatologist-led clinic. The results showed that patients receiving nurse-led care had greater improvement in disease activity than those under the rheumatologists, and were more satisfied with their care. Compared with the rheumatologists, the nurses made fewer changes to patients' medication and ordered fewer X-rays and steroid injections, while providing patient education and psychosocial support more frequently. The nurse-led care also had lower healthcare costs.

In their 2012 article, authors Thompson and Tonkin note that increasing numbers of nurse-led clinics, in which nurses have high levels of autonomy, have been set up across specialties (in particular in oncology and haematology).²⁴ The article reports that such nurse-led services are acceptable to patients, carers and staff, appropriate in a number of medical specialties and are cost-effective. The advantages of efficient nurse-led clinics include:

- they offer a cost-effective alternative for the expedited throughput of patients
- the majority of patients can be seen by a clinical nurse specialist (CNS) or other healthcare professional, for example a pharmacist, in the nurse-led clinic, enabling the consultant to focus on complex cases
- there is evidence that CNSs can provide a more holistic approach to patient management
- the clinics can offer continuity of care and enable the development of a long-term trusting relationship between patient and CNS (in a survey covering 88 nurse-led cancer care clinics in the West of Scotland, continuity of care was the most frequently cited perceived benefit of the clinics surveyed).

In a study of nurse-led cancer clinics in Scotland, Hutchinson and Simpson examined the establishing the scope of clinics and factors that affect their development and success. It also offered recommendations for the development of nurse-led cancer clinics in the region. In the study the authors identified the benefits of nurse-led clinics as follows:

- reduced waiting time for patients.
- continuity of care.
- holistic approach to treatment.
- reduced pressure on medical clinics and consultant time.
- increased amount of time spent with the patient
- team approach and multidisciplinary team access.

The study also looked at suggestions for improvements, some of which can be seen as obstacles to the success of the clinics (although they may also be seen as enablers). These suggestions were as follows:

- scope of the clinic could be extended to offer an increased service by either training staff for extended roles or widening the group of patients; it could also offer more sessions
- regular audit, evaluation or patient satisfaction surveys could be carried out
- accommodation could be extended or improved
- provision of administrative support was needed
- increased nursing/allied health professional staff cover for absence/to increase the efficiency of the clinic.²⁵

In an article published in the journal *Primary Health Care*, Christian Duffin reported on discussions around obstacles to the implementation of nurse-led clinics.²⁶ One of these obstacles was resistance from GPs who were concerned at nurses encroaching on what they see as their area of speciality. One nurse was reported as saying that doctors in her region were concerned that nurses would prescribe too many medicines or make too many referrals but these concerns proved unfounded once the nurse-led clinic became established.

In terms of nurse-led clinics in primary health care, a study of nurse-led wound clinics established there were significant cost savings in providing health care within this setting.²⁷ The study estimated that for patients simply requiring suture/clip removal the potential savings to the health care trust was in the region of £500,000 (AUD \$975,000) over a two-year period. In addition to the cost savings, the wound clinics were seen as an excellent educational resource for nurses and other healthcare professionals to learn about the care of patients with wounds. Key to the success of these clinics is the need to choose nursing staff with a keen interest in wound care and who are motivated to improve wound care outcomes for their patients.

A study of community-based nurse-pharmacist led pain clinics in the north of England services reported that these clinics have the potential not only to reduce the burden on secondary care but also decrease long waiting times for referral to secondary care.²⁸ The study identified four factors which contributed towards positive patient experience with the service: ample consultation time, listening and understanding individual patients' needs, in-depth specialised knowledge, and a holistic approach.

International models/studies of nurse clinics/nurse-led clinics – New Zealand

In contrast with Australia, the New Zealand health system appears to have more fully embraced the nurse-led clinic model, with various examples cited across a range of health care settings.

A number of New Zealand nurse-led clinics are aimed at addressing health needs within the Maori community. An example of this is the study by Marshall and Floyd which reports on 19 Nurse-Led Healthy Lifestyle Clinics (NLHLCs) which targeted Maori, Pacific and people living in high deprivation areas.²⁹ This study is of particular note (and contrasts with a number of other New Zealand studies) as it examines in considerable detail the factors relating to the effectiveness of the nurse-led clinics, as well as any obstacles to their success.

These clinics were seen to be very successful, with one nurse participant saying ‘the main benefits to our patients were that they got health care that they wanted, in the way they wanted it, when they wanted it.’ (pg. 291). The study reported that in general, nurses were passionate and positive about their clinics, and their ability to deliver enhanced health care formed a large part of this attitude. The positive impact of these clinics was separated into the following themes:

- **Improved health care**—an improvement in health care outcomes was one result of the clinics. A variety of factors contributed to this improvement in health care, including:
 - reducing some of the barriers to patients accessing health care
 - time for in-depth consultations and building relationships
 - development of a holistic approach which was inclusive of family/whanau (extended family)
 - development of resources or information packs for patients
 - Initiating and developing recall systems for patients.
- **Patient empowerment**— many nurses commented that having the time to discuss and explain health issues gave the patients a better understanding of the role of self-management of their health. The relationship that developed between the nurse and patient allowed the nurse to become a ‘health resource’ for the patient. The development of individuals’ responsibility for their health was one of the attitude changes noted by many nurses. Patients would often be resistant or indifferent to proposed care until the condition, lifestyle factors and care were explained. Once they understood the relationship between these aspects, their attitude towards their health care changed.
- **Nurse empowerment**—nurses felt empowered by participating in the clinics. This related to extending their knowledge, gains in confidence, and feeding off the positive feedback received from their patients. Many nurses commented on how the clinic gave them the opportunity to develop their own knowledge, or gain experience in applying information they had previously gained from in-service courses. Given the time available in the consultations and the relationships which developed between nurses and their patients, health issues beyond the original referral were often raised. This broadening of the topics gave nurses the opportunity to provide more holistic health care which, in general, they found very satisfying. One nurse was quoted as saying ‘Like, you might have somebody for instance who is a diabetic, comes for a diabetic check but [their] main presenting issue for that person at that time is not their diabetes. And then you can put systems in place, get them linked into the appropriate people ... so we were able to wrap a whole lot of different things around her just from one clinic appointment which diabetes never even got addressed. It was least of her worries.’ (pg. 296). Another nurse said ‘I feel quite empowered by it—I really quite enjoy it. [You] pick up on other

sorts of stuff that [have] never been picked up before, because we've had the time. And then you also form this relationship with people and that's quite valuable really.' (pg. 296).

The study also outlined a number of obstacles to the success of these nurse-led clinics. These were summarised as follows:

- uncertainty regarding funding
- uncertainty of continuation of the clinics
- problems with IT systems/templates
- patients not attending appointments
- problems with the availability of clinic appointment times (as a result of staffing or space issues) - many noted the clinic times precluded many patients who were eligible for, and in need of, support
- target populations being particularly difficult to contact and to encourage to book a clinic visit.

The theme of nurse empowerment was also discussed in another New Zealand study of weekly, on-site, nurse-led health clinics at an aged care facility in Rotorua.³⁰ The study noted the perceived benefits for nurses involved with nurse-led clinics have been reported as an increase in job satisfaction, self reliance and confidence, increased collaboration with other health professionals and an increased level of responsibility for assessing residents' needs.

As per the UK and Australia, there are several examples of nurse-led clinics which are focussed on specialisms within the broader acute health care sector. One of this is a vaginal pessary clinic which was run at the Counties Manukau District Health Board's (DHB) outpatients/ambulatory care service.³¹ The study reports clients as being satisfied or very satisfied with the care they received. The study stated that clients felt they were treated with dignity and respect, and were well informed about their options. This model of care was seen as being more efficient, more economical and a better use of clinic time. The nurse-led clinic had a flow-on effect to doctors' clinics, where there were more clinic slots available. In terms of obstacles, these were mostly of an administrative side nature, particularly dictating letters and managing clinical time.

In terms of examples of nurse-led clinics in primary health care, a 2011 article looked at the evaluation of a nurse-led clinic at Rotorua's Community Link centre which was treating up to 700 people a month.³² The evaluation of the clinic showed it was successful in increasing access and reducing barriers to primary health care. Another study which looked at primary health care nurse-led clinics was a study which looked at reasons for non attendance at nurse-led wellness clinics.³³ The study highlighted the importance of administration processes for scheduling routine appointments and reminding patients about appointments; it provided evidence that administrative support for nurse-led clinics is necessary.

International models/studies of nurse clinics/nurse-led clinics – Canada

There is very limited material published on nurse-led clinics in Canada. It would therefore appear this model of care is uncommon in Canada, despite Canada sharing a number of similarities with the Australian health care system.

One of the studies looked at the effectiveness of leg ulcer nurse-led clinics compared to care delivered in the home.³⁴ The study was inconclusive in terms of whether care was better delivered at home or in a nurse clinic but concluded that organisation of care was more important than the setting. The study recommended that if feasible in a region, health authorities should consider both settings in order to provide mobile individuals with a choice best suited to their particular needs.

Evaluation of nurse led-clinics

As described in many of the studies outlined earlier in this paper, the effectiveness of nurse-led clinics has been subject to assessment and evaluation. This evaluation does show some variation but some of the themes identified in evaluation reported include an examination of the following:

- Patient outcomes:
 - morbidity
 - mortality
 - quality of life
 - satisfaction
 - patient compliance
 - knowledge
 - preference for nurse or other practitioner
- Process of care outcomes:
 - practitioner adherence to clinical guidelines
 - standards or quality of care
 - practitioner health care activity (examinations, provision of advice).
- Resource utilisation outcomes:
 - frequency and length of consultations
 - return visits
 - prescriptions
 - tests and investigations
 - referral/use of other services.
- Cost outcomes:
 - direct (service)
 - indirect (societal) costs.³⁵

What literature exists suggests an increased quality of life for patients accessing nurse-led clinic services. For example, a Cochrane systematic review of 'Home care by outreach nursing for chronic obstructive pulmonary disease' found a statistically significant improvement in health related quality of life.³⁶ Similarly, a randomised control trial evaluating a model of collaborative care using primary health care nurses working in general practice as case managers for depression alongside diabetes or heart disease: showed significantly improved depression and treatment intensification, sustained over 12 months of intervention and reduced ten-year cardiovascular disease risk.³⁷ Therefore, nurse-led clinics appear to be an effective model of primary health care.

One example of patient benefit associated with nurse-led clinics is the evidence that patient compliance with medication or care is better under nurse-led care than under doctor-led care. A reason why compliance may be better under nurse-led care is that nurses spend more time with patients and communicate with them more effectively about medication use.³⁸ Another study showed that nurse-led clinic patients showed improvement after the nurse clinic consultation, with the best rates being found in wound and continence clinics.³⁹ The study also reported that satisfaction scores for both nurses and clients associated with nurse-led clinics were high—a theme reflected in numerous other examples.

Nurse-led clinics have the potential to reduce cost and doctors' workloads while maintaining quality of care. A Cochrane systematic review of 'Substitution of doctors by nurses in primary care' aimed to

evaluate the impact of doctor-nurse substitution in primary care on patient outcomes, process of care, and resource utilisation including cost. They found little difference between health outcomes for patients; however, patient satisfaction was higher with nurse-led clinics (perhaps due to longer consultation times, greater information provision, and scheduling patients more frequently). The impact on doctors' workload and direct cost of care was variable.⁴⁰

One concern about nurse clinics is whether they are safe. One study on the 'Feasibility, acceptability and safety of a nurse led hepatitis B clinic based in the community' based in Sydney, Australia, demonstrated that the community based nurse clinic was feasible, acceptable, and safe.⁴¹

Findings

A review of national and international literature has shown that nurse-led clinics can provide a highly successful model of health care. These clinics can help prevent costly hospitalisation while providing safe, efficient and high quality care.

The review has identified a number of enablers and barriers to the success of nurse-led clinics. These are outlined below:

Enablers

- space within the general practice office for a nurse
- support from GPs
- sufficient time for consultation with external stakeholders, members of the general practice team and consumers before introduction of any a nurse-led clinic model
- extension of the scope of a clinic to offer an increased service (by either training staff for extended roles or widening the group of patients)
- offering more clinic sessions to patients
- carrying out regular audit, evaluation or patient satisfaction surveys
- extending or improving accommodation
- provision of adequate general administrative support
- increased nursing/allied health professional staff cover for absence/to increase the efficiency of the clinic
- sufficient administration support for scheduling routine appointments and reminding patients about appointments
- choosing nursing staff with a keen interest in the health speciality and who are motivated to improve health outcomes for their patients.

Barriers

- a general lack of support for the clinics
- a lack of GP referral to the clinics
- an increase in nurse and practice staff workload
- lack of space
- inadequate role/job descriptions
- lack of confidence to negotiate with general practitioners
- nurses' personal desire to enhance their role
- access to education
- lack of time
- resistance from GPs who are concerned at nurses encroaching on what they see as 'their territory'
- uncertainty regarding funding—uncertainty of continuation of the clinics
- problems with IT systems/templates
- patients not attending appointments
- problems with the availability of clinic appointment times (as a result of staffing or space issues)—clinic times may preclude patients who are eligible for, and in need of, support.
- target populations being difficult to contact to book clinic visits.

Conclusion

While aspects of the nurse role in nurse-led clinics have been identified, and as noted above, there is no universally accepted description of the role or the model of nurse clinics. Despite this, there are a multitude of examples of nurse-led clinic models, both nationally and internationally. A review of the literature on these clinics shows that this method of providing health care can lead to significant health improvements and can be a cost-effective alternative to care delivered in the acute sector or in the standard general practice setting.

An examination of the barriers and enablers to the success of these nurse-led clinics shows that there are a number of factors that can help to make this model of care work for patients and nurses.

Despite the positive findings from research about nurse-led clinics and primary health care, and calls for building the capacity of nursing services within primary health care, many patients who are treated outside hospital will not have an opportunity to access nursing services. Patients who can access these services, including nurse-led clinics, may encounter a wide variety of different models. Nurse-led clinics will differ according to the health settings in which they operate. There are varying advantages and disadvantages of these models, and this provides further evidence that the adoption of a one-size-fits-all nurse-led clinic approach may not always be appropriate.

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