Nurse Practitioner Proposal

BUSINESS CASE

Southern District Health Board

Nurse Practitioner Position in Community Mental Health Teams Aligned with NGO/Residential Services

Developed by:
Bernadette Forde-Paus and Heather Casey
In consultation with:
Louise Carr PACT CEO

May 2010

NP Proposal	Table Of Contents

NP Proposal	Executive Summary

This is a business case to gain long term funding to employ a Nurse Practitioner in the Community Mental Health teams which is directly aligned to the mental health NGOs/residential providers. The Nurse Practitioner model proposed is different to the current model of case-management and geographical sectorisation, but one that is considered to be highly cost-effective and efficient while ultimately aiming to improve the health and well-being of those experiencing enduring mental health problems. Its primary aim is prevention of relapse and admission, reduction of community team case-loads, discharge of long-term hospitalised patients by increasing the capacity and capability of mental health NGOs. It is strongly based on the need for better integrated care across all health care settings and is directly aligned to the Ministry of Health's Primary Health Care priorities and the leading Mental Health and disability strategies.

The investment proposed in this case is 1.0FTE Mental Health Nurse Practitioner position. The costs of employing a Nurse Practitioner would be offset by utilising existing community FTE vacancy. Further savings will be potentially realised though reduced bed day stays and bed closures as bed usage decreases.

NP Proposal	Background

The Nurse Practitioner Role

Whilst Nurse Practitioner (NP) positions are relatively new in New Zealand (NZ) they are well established in other countries, with the research clearly showing positive and cost-effective outcomes of the NP role for patients, employers and purchasers of health care services. Numerous peer-reviewed journal articles and studies on the NP role have been published over the last 30 years with there being no evidence to show that NP services are detrimental to consumer care (Ministry of Health 2002).

The Nurse Practitioner Scope of Practice

Nurse Practitioners are expert nurses who work within a specific area of practice incorporating advanced knowledge and skills, such as managing and prescribing medications, diagnosing, ordering and interpreting diagnostic and laboratory tests, admitting and discharging to inpatient settings and administering interventions for the management of potential or actual health needs. Nurse Practitioners practise both independently and in collaboration with other health care professionals to promote health, prevent disease/illness and to diagnose and manage people's health needs, often by working across the traditional boundaries of hospital based and community services. In the late 1990s the New Zealand Government recognised the potential that existed within the experienced nursing workforce in New Zealand and

realised the potential the NP role could play in delivering the Government's priorities for health (Ministry of Health 2002, NZ Health Strategy).

Health Needs Of New Zealand

There is now a predicted clincal skill shortage in New Zealand, for example, research conducted by the Clinical Training Agency indicates that the demand for GPs will outstrip supply in future years, unless we deliver services in a different way. Shortages in many other areas have also been identified, including within the mental health and disability sectors. In light of these future predictions there is a critical need to change the way we structure our health workforce. The development of the NP role is a direct response to the changing needs of our workforce and our nation's health needs. With the expanded skills within the NP role, the position allows for greater substitution between clinical roles thereby promoting efficency and flexibiltiy in the use of valuable resources. Throughout history professionals have extended their boundaries at different times as a result of need, and although the NP role is different from that of a doctor, NPs can and will fill gaps created by doctor shortages as well as undertaking some areas of practice that are currently considered the domain of doctors. So whilst it's acknowledged that the development of the NP role challenges the traditional boundaries of nursing practice it will mostly complement the role of other health professionals enabling critical substitution between groups thereby promoting efficiency and flexibility in service provision (Ministry of Health 2002).

Since the development of the first NP role in NZ in 2001 the role has been shown to be significanlty contributing to the improvement of health outcomes for New Zealanders. The Distrcit Health Boards-NZ website (www.dhbnz.org.nz) provides NP case studies which show how NPs have significanlty improved the health of New Zealanders through the use of advanced nursing skills and substitution of roles.

ODHBs Mental Health Services Nurse Practitioner Strategy

The Otago District Health Board's Mental Health Service (MHS) was quick to see the potential of the Nurse Practitioner role. In 2003 the Mental Health Service's *Nurse Practitioner Working Party* was developed to explore the potential of the role within the service. A *Strategic Planning* document was developed which identified service gaps within the mental health service and then identified opportunities for the service through the development of NP roles. Whilst identifying potential beneficial NP positions, the development of NP roles has been limited by a lack of nurses gaining the NP registration. Last year the *Otago-Southland Nurse Practitioner Strategy Development Steering Group* was developed which is providing strategic direction for NP development within the Southern DHB. This group has identified the potential benefits that this proposed NP position can make and endorses the proposal.

ODHB Current Nurse Practitioner Position

There are currently two NP roles established within the MHS. One is in the area of dual diagnosis (developmental disability and mental health) and the other in Mental

Health Services for Older Persons. Both of these NP positions were developed because of a lack of experienced clinicians within these specialised areas of mental health, in particular consultant psychiatrists and also because of significant gaps in service provision as a result of these gaps. Both positions have shown significantly positive outcomes. The tables below show the identified needs which led to the development of the NP role and also the outcomes of the roles following evaluation;

Table One: Dual Diagnosis NP Role

Nurse Practitioner Mental Health (with prescribing) Area: Dual Diagnosis: Mental Health & Developmental Disability, Otago DHB
Identified Need Gaps in service provision for adult mental health clients with Developmental Disability Lack of psychiatrists (and skilled clinicians) with dual diagnosis skills (locally and nationally), resulting in: → Long waiting lists for psychiatrist – both initial assessments and follow-up assessments → Crisis admissions due to non-responsive service → No established dual diagnosis service in Southland or clinicians within the area with Dual Diagnosis experience → Southland wanting to contract service from ODHB
Outcomes After 12 month pilot: → Low relapse rate, → Reduced admission rates → Lower use of the Mental Health Act → Evidence of decrease in waiting times for assessment and follow-up appointments from 8-10 wks to 2 wks → Evidence of significantly decreased requirement for psychiatrist consultations – allocation of psychiatrist time diminished to 1 hour per week for this population. → Establishment of nurse-led out-patient clinic across mental health community teams. → Number of consultations / education sessions with the client, family/ NGOs, GPs and other health professionals with positive survey feedback.

Table Two: Mental Health Services for Older Persons Service NP Role

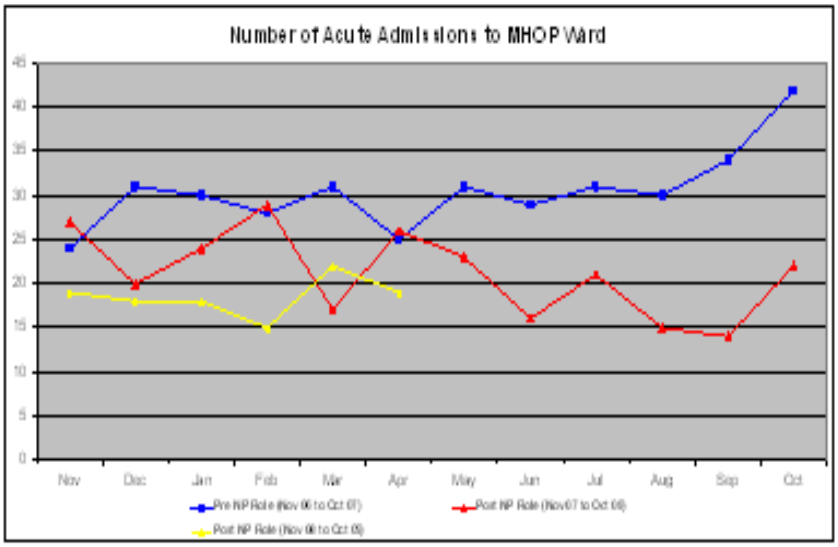
Nurse Practitioner Mental Health (with prescribing)
Area: Dual Diagnosis: Mental Health Service for Older Persons, Otago DHB

Identified Need:

- → Gaps in service provision
  - → Long-term unfilled psychogeriatrician position leading to:
    - → Overworked psychiatrist
    - → Long response time for new assessments and follow-up visits
- → Crisis admissions due to non-responsive service
- → Minimal links with Residential Aged Care Facilities (RACFs)

Outcomes

- → Low relapse rate as a result of Early intervention and a highly responsive service
- → Reduced admission rate – see graphs below
- → Evidence of decrease in response times for assessment and follow-up appointments
- → Reduction in psychiatrists workload
- → Development and implementation of education sessions to RACF staff
- → Supervision and mentoring to RACF nurses
- → Consult-liaison with GPs and other health professionals
- → Very positive satisfaction (of service) survey results.



Both of these NP positions work within a collaborative model in which the NP is partnered with a consultant psychiatrist with whom they triage to and collaborate with as needed. Each NP role has designated time with their consultant partner.

NP Proposal	Proposal / Initiative Description

The current proposal is for the development of an NP role in the General Adult Community Teams which is specifically aligned with the Mental Health NGOs. Initially starting with PACT, with a plan to progress out to other NGOs in the future if successful outcomes are achieved.

The development of a Mental Health NP role aligned to both the provider-arm MHS and PACT is believed to be a timely, cost effective and innovative solution to the current model of service provision. It is also believed to be a model which is sustainable for the future as MHS focus on the provision of specialist service provision.

Current Situation

Service Provision Model

Currently the MHS community teams operate on a model of geographical sectorisation which means that NGOs work with the full compliment of mental health clinicians, for example, in a residential service there can be a variety of different psychiatric district nurses (PDNs)/case-managers and psychiatrists providing services to the individual residents. There is evidence to suggest that this is not the most effective or efficient way of operating, particularly in terms of building effective relationships with the NGOs and General Practice Teams (GPTs). A much closer alignment with NGOs and GPTs has been shown to be more effective at increasing capacity and capability to manage mental illness (Burns 2004). This is consistent with feedback from the NGOs which indicates that our current model of service provision results in a variation of service/input from the different clinicians. This variability can result in a lack of clarity and expectation about roles.

Service-user Numbers:

Currently PACT service-users receive input from a variety of different clinicians from the community teams:

- **Dunedin** has 82 service-users receiving input from 28 clinicians
- **Clutha** has 19 service-users receiving input from 7 different clinicians
- **Waitaki** has 14 service-users receiving input from 4 different clinicians
    - These numbers exclude where the person is seeing a clinical psychologist only.

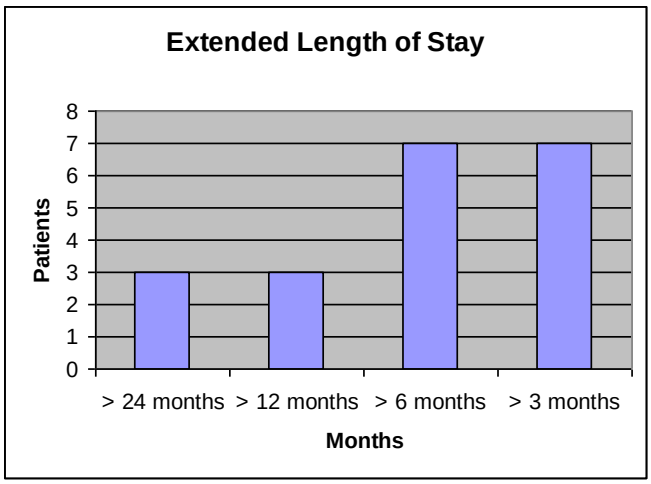
It is envisaged that the whole group - 82 of Dunedin PACT service-users would transfer to the NPs caseload, thereby freeing up capacity within the PDNs/case-mangers and psychiatrist's caseloads. As discussed above, on successful evaluation of the role it is envisaged that this role would spread out to other NGOs in Dunedin and potentially to the regions as well.

High and Complex Long-Term Service-users of the Mental Health Inpatient Service
In July 2009 there was an exploration and analysis of the in-patient occupancy rates. This report showed that there are a number of patients who have been in hospital for long periods of time. These patients fall into two groups:

1. Those that have very complex/difficult presentations and because of this, there is no community service provider willing to accept them as they do not believe they have the capacity and capability within their organisation for managing the complexity of the presentation. These patients typically have high levels of risk and/or antisocial behaviours.
2. Those who are considered ready for discharge, but cannot do so because there is no bed available in the community.

Analysis of these long stay patients showed the following numbers and length of stay:

Extended Length of Stay by Month and Numbers



An analysis of these 20 long-stay patients (greater than 3 months) showed:

- **Greater than 2 years & greater than 1 year**:
  - There were six patients in this category, they were all very complex in their presentation and for this reason there was no NGO with the capacity to manage the complexity of their presentation.

- **Greater than 6 months**
  - Of the 7 patients in this group 3 were identified as being too complex as described above. Of these 3, one requires acute care and two sub acute/rehabilitative care.
  - The other 4 were awaiting a suitable community placement
    - One has been waiting for 14 days
    - One has been waiting for 30 days
    - Two have been waiting for 185 days (6 months)

- **Greater than 3 months**
  - Of the 7 patients in this group 3 are identified as being two complex to discharge as discussed above
  - The other 4 were awaiting a suitable community placement
    - One has been waiting for 90 days
    - One for 100 days
    - Two for 30 days

Summary of Numbers

Group of people who have been in hospital for greater than three months:

- 552 bed days had been used by patients ready for discharge but awaiting the availability of a bed in the community
- 12 patients were considered to be very complex in their presentation and for this reason they have no identified community service provider so no discharge options/plans.

One of the recommendations from the evaluation for this group of long-stay patients was to consider joint MHS and NGO shared-care services. An NP position which is closely aligned and working to increase the capacity and capability of the NGO could provide a good starting point for potential discharge for this long-term complex group of patients.

Problems & Opportunity

An NP model of close service alignment i.e. "one clinician for one service" has shown the ability to offer a more responsive service with much less fragmentation and therefore greater continuity of care. It has also shown the ability to significantly increase the capacity and capability of NGO staff through collaborative practice, education and mentoring/supervision. It is anticipated that an NP position spanning the MHS and PACT will yield the same positive outcomes that the current two established NP roles have shown, which includes reducing relapse rates and admission rates. It is also envisaged that by offering a sustained level of clinical guidance and responsiveness aimed at increasing the capacity and capability of the NGO the role will allow for the discharge of a group of more complex long-term hospitalised patients sitting in the Ward 11 setting, as discussed above. Along with the ability to enhance the lives and wellbeing of people with mental illness it is also anticipated that relationships between the NGOs and MHS will be strengthened and enhanced by this initiative.

Service to be Delivered

It is envisaged the position will work similarly to the current NP roles where the NP will:

- Lead mental health care within the NGO, integrating care between the provider-arm service, the NGO and the General Practice team.
- Have clinical responsibility (from provider-arm service) for assessment and management of the clients mental health
  - The NP would be partnered with a psychiatrist and have a collaborative, triaging relationship.

- Would consult/refer to other members of the multi-disciplinary team as appropriate, most likely for time-limited assessments/intervention, for example, clinical psychology or functional assessments from OTs.
- Along with a mental health focus will also provide an integrated physical health focus to clients support plans.
- Will support the Needs Assessment process, initiating reviews and supporting the process for enhancing independence.
- Mentoring and supervision to clinicians within the NGO
- Training and education to NGO staff to maximize their capacity and capability with mental health support by providing clinical expertise on MH, ID and physical health issues.

Anticipated Outcomes

- Increase early intervention (proactive assessment and intervention) to the PACT consumers
- Prevent hospital admissions, EPS contacts/consultations and decrease the length of stay for PACT consumers where hospital admissions are unavoidable.
- Build the capacity of PACT to manage more complex presentations/interventions within the service by boosting the clinical input. This will increase confidence with other health providers and General Practitioners
- Promote partnership and improved integration across primary/community and secondary services for PACT consumers.
- Providing targeted mental health education and clinical coaching/mentoring for PACT staff.

NP Proposal	Strategic Alignment

Working Together: Ministry of Health's Priorities

The current proposal aligns with the Ministry of Health's strategies and priorities for Mental Health Services. The current Mental Health vision, strategy and action plan - Te Hononga (2007), Te Kokiri and Te Tahuhu: *Improving Mental Health 2005-2015*, outline several objectives aimed at building mental health services outside the provider-arm by broadening the range of services and supports available to people affected by mental illness. There is a very strong emphasis on agencies working across boundaries. Of particular interest to this current proposal are the strategies within Te Tahuhu of "Working Together" and "Responsiveness". "Working Together" is aimed at "strengthening cross-agency" relationships (pg. 18), with immediate emphasis on strengthening the alignment between the delivery of provider-arm health services and the delivery of NGOs. It is aimed at building and strengthening the capability of NGOs to better respond to the needs of people with mental illness. It outlines the need for an immediate emphasis on, "building linkages between providers of mental health services to ensure integration occurs to promote mental health and wellbeing and prevent mental ill health". The

"responsiveness" challenge reinforces the importance of services meeting the unique needs of specific population groups.

Physical Health Issues

One of the identified needs of this population group (people with enduring mental illness) is that they are carrying a far greater burden of physical ill-health than the general population. Data from both New Zealand and international literature describes alarming disparities in morbidity and premature mortality along with inequality and inequity in accessing services. This inequity in health status and the need for improvement in the population has been recognized and identified by the government with one of the National Health Strategies being to ***"Improve the Health Status of People with Severe Mental Illness".*** The NP scope of practice brings with it a breadth of practice with Mental Health NPs having a strongly integrated physical health focus to their care and treatment. They have been shown to not only be able to bridge the provider-arm/community split but also the head and body split.

NP Proposal	Business & Operational Impacts

Service enhancement between PACT and the MHS and also the GPTs to meet the needs of this population for minimal investment is an anticipated impact of this proposal. The introduction of the NP role is envisaged to have many and significant positive impacts on the target population as outlined above. The fundamental drive for change is the development of a proven clinically effective and cost effective model for service delivery which is sustainable into the future as the health dollar is stretched.

NP Proposal	Initiative Risk Assessment

Associated Risks

There are very few risks associated with this proposal outside normal operational issues, with the most obvious risk being the cost of employing an NP, however, the scope and ability within the NP role to work with a whole service and the likely reduction in case-loads for community teams offsets this cost.

It will be important that the nurse taking on this role is well supported to ensure successful implementation of this initiative. This can occur through mentoring from the current NPs who have successfully implemented similar roles and also support from the management team. It will also be reliant on partnering with a psychiatrist who understands the function of the NP role. In addition to this it will be reliant on support to implement / have the role accepted within the community teams. This will require by-in from senior staff / unit managers within the community teams.

Risk of Not Proceeding with Initiative

- Lost opportunity to improve service provision and patient outcomes
- Lost opportunity to promote an increased alliance and more effective partnership between the mental health service and PACT/NGOs.
- Lost opportunity to promote workforce development for NGO staff to strengthen their service.
- Lost opportunity to promote partnership and improved integration across primary and secondary services.

NP Proposal	Cost / Benefit Analysis

Savings/Benefits

The relative cost of maintaining population wellness in the community is well established as being less, both in dollar terms and in quality of life terms, than admitting clients to an in-patient environment due to preventable relapse and accessing crisis services. The data we have to date both nationally and internationally on the efficiency of such a service demonstrates that building capacity within the community is much more cost effective than inpatient admissions and long-term stays. A fully implemented NP role, as described above is expected to decrease CMHT caseload by an anticipated 82 people initially and in time in excess of 200 as it spreads over other community residential services. It is also anticipated that it can support the capacity of PACT to manage more complex presentations thereby discharging some long-stay patients from the inpatient setting.

Costs

These costs are based on no additional cover being provided for leave and a normal day shift is worked. A mid-range salary for Grade 8 Nurse Practitioner has been used, and no step or award increases have been factored in. Being a mobile position, the cost of leasing a car (1800CC Toyota Hatch) used for 70% of the time is included, this being more cost efficient than utilising a transport pool vehicle.

Salary of Nurse Practitioner	$ 93,951 (mid range)
Vehicle expenses	$ 6,194 (maybe able to use existing pool car)
Telephone expenses	$ 1,742
Information Technology	$ 1,620
Overheads	$ 18,264
TOTAL	**$121,771**
Without lease costs	**$115,577**

Benefits

- **Mental Health Service**

- A cost effective, sustainable and innovative model for servicing a large consumer group with the potential to reduce relapse, reduce use of Emergency Psychiatric Services, reduce admissions or LOS when admissions are unpreventable, allow discharge of long-term inpatients.
- As described above it is envisaged that through the provision of an alternative model of service provision that caseload numbers in the community mental health teams will drop significantly, thereby freeing up staff resources to be used in other areas of shortage and insufficiency

- **PACT**
  - The more responsive and proactive service provided to PACT will increase the capacity and capability of PACT to manage clients in the community setting and reduce the need for the use of Emergency Services.
  - It will also provide support and supervision to PACT clinical staff
- **Consumers**
  - Improved health – both mental and physical health with decreased exacerbations/relapse and therefore reduced disruption to people's lives.
  - Reduced length of stay for unavoidable admission
  - Potential discharge from hospital
- **General Practice Teams**
  - Increased coordination and more integrated care
  - Easier access for clinical advice

NP Proposal	Implementation Strategy

Initial Implementation

- It is proposed that the NP position would initially be implemented by the current Mental Health NP using the allocated project portion of that position.

NP position advertised

- At the same time the NP position will be advertised within the service as an NP intern position. The successful applicant will be appointed to the position and begin to work alongside the implementing NP as the role is establishing and embedding.

NP Intern position

A clinically-based training programme will be wrapped around the successful candidate which will provide the necessary clinical experience for he target population, as well as strengthening clinical leadership. This will include:

- Clinical practice alongside one of the current NPs and a psychiatrist, along with access to adequate numbers of patients with relevant health needs with the degree of complexity required to challenge and extend the NP intern.
- An appropriate range of experiences to gain sufficiently broad experience with appropriate supervision processes to ensure extension of practice and

patient safety,

- Release time for, academic papers (academic attendance and additional study time leave),
- Leadership opportunities,
- Support from an NP to mentor through the Nursing Council's Nurse Practitioner application and interview process

The programme would be established based on graded responsibilities over the training period.

Consultation Process to Gain Support and Endorsement of the NP role.

Consultation with NGOs

- Consultation has already occurred with PACT who is highly supportive of the role. PACT senior management team will manage consultation within their team/service.

Consultation with Community Mental Health teams

- Preliminary discussions have occurred and will be progressed by the Director of Nursing as the project develops.

Consultation with Nurse Leaders and Mangers

- Discussion has already occurred within the NP Steering group which is supportive of the role being developed. This Steering group has the Executive Director of Nursing and other Directors of Nursing on it. Ongoing feedback to this forum and other Directors of Nursing and managers would occur.

Planning and Funding

- There is representation from Planning & Funding on the NP Steering group which is supportive of NP initiatives. Progress and evaluation will be reported back to Planning & funding

NP Proposal	Conclusions & Recommendations

The current proposal is population focused, needs based and community oriented and is supported internationally by highly credible bodies such as the World Health Organisation under the principles of Primary Health Care. It also solidly supports our own national health objectives contained in the Primary Health Care strategy and Mental Health strategies. Whilst it has a primary aim of prevention of relapse and admission, reduction of community case-loads and discharge of long-term hospitalised patients into the community it is also strongly based on the need for better integrated care across all care settings and improved NGO care through nursing and caregiver education and training. Its overarching principle is improved health and well-being for those experiencing enduring mental health conditions and associated disability. The proposal already has buy-in and many levels and it coincides with a time when there are three nurses within the service close to completing NP registration.

References

Ashton, T. (2000). New Zealand: Long-term care in a decade of change. Long Term Care Systems, 19(3), 72-85.

Aigner, M., Drew, S. & J. Phipps. (2004). A comparative study of nursing home resident outcomes between care provided by nurse practitioners/physicians versus physicians only. Journal of the American *Medical Directors Association, 5*, 16-23.

District Health Boards New Zealand Website: Future Workforce/Nursing Projects/ Nurse Practitioner: www.dhbnz.org.nz

Ministry of Health. (2000). New Zealand Health Strategy. Wellington: Ministry of Health

Ministry of Health (2002). Nurse Practitioners in New Zealand. Wellington: Ministry of Health

Ministry of Health: Nurse Practitioners in New Zealand, Ministry of Health website www.moh.govt.nz/nursepractitioner

Ministry Of Health, (2006) Nurse Practitioner Employment and Development Ministerial Working Party, http://www.moh.govt.nz/moh.nsf/indexmh/nursepractitioner-working-party

Ministry of Health (2001). The Primary Health Care Strategy. Wellington: Ministry of Health.

Ministry of Health 2006. Te Kokiri: The Mental Health and Addiction Action Plan 2006-2015

Onatrio Ministry of Health and Long Term Care. (2002). The Ontario Nurse Practitioner in Long-Term Care Facilities Pilot Project. Ontario, Canada. Retrieved 24 January 2007 from http://www.health.gov.on.ca/english/public/pub/ministry_reports/nurseprac02/nurseprac02_mn.html

Rosenfeld, P., Kobayahsi, M., Barber, P. & M. Mezey. (2004). Utilization of nurse practitioners in long-term care: Findings and implications of a national survey. Journal of the American Medical Directors Association, 5, 9-15.