

Queensland Health

Review of Restrictions on the Practice of Chiropractic and Osteopathy, Medicine, Occupational Therapy, Optometry, Pharmacy, Physiotherapy, Podiatry, Psychology and Speech Pathology

Final Report

November 2000



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Background

Health practitioner legislation has been the subject of comprehensive review in Queensland.

In 1993 the Queensland Government initiated a review of health practitioner legislation – the Health Practitioner Registration Acts (HPRA) review. This review proposed a core practices model for the regulation of the health professions. Implementation of this model would mean that that the current broad statutory definition of practice would be removed and replaced with statutory restrictions on specific activities or procedures that pose a significant risk of harm to the public.

In 1996, the Queensland Government released a *Draft Policy Paper: Review of Medical and Health Practitioner Registration Acts*. A broad range of reform proposals were presented in the paper, covering professional registration requirements, restriction on the use of professional titles, complaints and disciplinary procedures, management of impaired practitioners, advertising, business operating restrictions, and practice restrictions. Legislative change dealing with all of the above issues except some business operating restrictions (the subject of separate review) and practice restrictions have been either implemented, or introduced into Parliament.

The *Draft Policy Paper* canvassed, as a preferred policy position, the implementation of a core practices model to replace the existing practice restrictions. Current practice restrictions are based on broad definitions of practice for some of the registered professions. The broadly defined practice is restricted to registrants and, in some cases, other registered professions are exempted from the restriction. There are currently broad practice definitions and restrictions on the practice of chiropractic and osteopathy, optometry, pharmacy, physiotherapy and podiatry. There are no definitions of practice or restrictions on the practice of medicine, occupational therapy, psychology or speech pathology.

This report represents another step in the review of the regulation of health practitioners and was commissioned to:

- further refine the core practices model contained in the *Draft Policy Paper*; and
- conduct a public benefit test (PBT). The core practices model involves restrictions of professional practice which are potentially anti-competitive. A PBT of the benefits and costs of those restrictions is required under National Competition Policy.



Refinement of the Core Practices Model

The *Draft Policy Paper* proposed a number of potential core practices. Table 1 outlines this proposed model.

Table 1: Proposed Core Practices

Core practice	Registered Professions
Professional dispensing of medicines, mixtures, compounds and drugs (not in derogation of Poisons Regulations)	Pharmacist Any other person authorised by the Pharmacy Board of Queensland
Prescribing of optical appliances for the correction or relief of visual defects and the fitting of contact lenses	Optometrist Medical practitioner
Moving the joints of the spine beyond a person's usual physiological range	Chiropractor Osteopath Physiotherapist Medical practitioner
Soft tissue surgery and nail surgery of the foot	Podiatrist Medical practitioner Nurse
Surgery (not otherwise restricted above)	Medical practitioner Other authorised person

Note: Dental practices were also considered as a potential core practice. An examination of the regulation of dental practices is the subject of a separate PBT report.

The Terms of Reference for the assignment required that this model be reviewed and refined.

The refinement of the core practices model was based on a risk of harm framework that required:

- identification of the nature of potential harm associated with each practice;
- evidence of the risk associated with a practice;
- description of the circumstances of that risk, whether caused by:
 - incorrect choice of practice by a health practitioner;
 - incorrect conduct of that practice; or
 - whether the risk of harm results from association with the practice rather than being a direct result of the practice; and
- whether restricting the practice to particular professions can mitigate the risk of harm.

To assist in the review eight focus groups were held, covering the following broad practice areas:

- joint manipulation;
- rehabilitation therapy;
- optical therapy;
- physical therapy;
- pharmaceutical dispensing;
- foot and ankle 'surgery';
- other foot and ankle treatment; and
- psychological therapy.

The purpose of the focus groups was to examine the issues relevant to a core practices model. Each group examined:

- practical ways of defining each practice;
- the nature of the harm that particular practices pose, including any evidence to identify the risk of harm;
- the type of skills or competencies required by health practitioners to manage those risks; and
- the professions that might be in a position to manage those risks of harm.

Based on information collected from the focus groups, the Review Team recommended that three practices be considered for inclusion in a core practices model.

Table 2: Refined Core Practices Model

Core practice	Registered Professions
Thrust manipulation of spine	Chiropractors Medical practitioners Osteopaths Physiotherapists
Prescribing optical appliances for the correction or relief of visual defects	Optometrists Medical practitioners
Surgery of the muscles, tendons, ligaments and bones of the foot and ankle	Medical practitioner Podiatric surgeon/Surgical podiatrists



Thrust Manipulation of the Spine

The Review Team was presented with a large range of evidence that indicated that the practice of manipulation of the spine posed significant levels of harm. However, it was considered that the risk of that harm occurring was relatively low. It was also identified that manipulations to the spine involving the applications of thrust movements possess the most risk. The information available did not show a reliable difference in risk between the registered professions currently involved in spinal manipulation.

Prescribing Optical Appliances

The Review Team's consideration of the practice of prescription of optical appliances focussed on two issues:

- the harm associated with misdiagnosis; and
- the risk of third party harm.

In an extreme case of risk of harm, associated with misdiagnosis, a person who is legally blind because of a retinal disorder, such as age related maculopathy, can have spectacles prescribed accurately by an automatic refracting machine without any recognition of the fact that the person is blind.

An example of third party harm linked to prescription is traffic accidents. Driver's licences can mandate the use of optical appliances in an effort to reduce the risk of traffic accidents from impaired vision.

Furthermore, inaccurate or inappropriate prescription of spectacles can alter or retard the development of the visual system in children.

Surgery of the Muscles, Tendons, Ligaments and Bones of the Foot and Ankle

The Review Team examined the information available to determine whether there was evidence to indicate a significant risk of harm from surgery of the muscles, tendons, ligaments and bones of the foot and ankle. Most of the studies examined related to differences in outcome between surgery conducted by different practitioners rather than the harm occasioned by the procedures themselves.

However, on balance, the Review Team took the position that there were issues associated with surgery of the muscles, tendons, ligaments and bones of the foot and ankle, which warranted further examination.

In particular, the issue of the practice of surgical podiatrists was examined in detail. Information reviewed by the Review Team questioned the appropriateness of training of surgical podiatrists compared to that of orthopaedic surgeons. However, the Review Team considered that the data presented did not provide a conclusive argument to justify the inclusion or exclusion of surgical podiatrists from performing surgery. Nevertheless, there

were issues relevant to a core practices model, which the Review Team considered, needed to be assessed:

- surgical podiatrists who undertake more complex foot and ankle surgery are now using the title "podiatric surgeon". The term "surgeon" has normally been used to mean a person with medical qualifications who has specialised in surgery and the use of the term by podiatrists may impact on consumer's ability to identify different practitioners; and
- surgical podiatrists are trained to undertake a range of procedures to the foot, but these skills are not as extensive as the skills attained by medical practitioners, especially those medical practitioners who have qualified in one of the surgical "specialties".

Taking into account these considerations the practice of surgery of the muscles, tendons, ligaments and bones of the foot and ankle was included in the refined core practices model and was examined further as part of the PBT analysis.

Public Benefit Test

The PBT analysis focussed on the three refined core practices – thrust manipulation of the spine, prescribing optical appliances and surgery of the muscles, tendons, ligaments and bones of the foot and ankle - and the alternative regulatory models outlined in the Terms of Reference:

- a title only model where there would be no restrictions on the practices of professions other than restrictions on title. Only registered practitioners would be allowed to use specific professional titles; and
- a core practices model where there would be restrictions on specific practices which pose significant harm for consumers. Restrictions on title would also continue under this model.

Findings - Thrust Manipulation of the Spine

Thrust manipulation of the spine is a form of treatment that uses body leverage and a physical thrust to one joint, or a group of related joints, to restore joint and related tissue function.

The level of harm associated with thrust manipulation of the spine is significant, although the risk of harm occurring is relatively low. Table 3 provides a quantitative indication of the risks associated with the practice.

Table 3: Risks Associated with Spinal Manipulation¹

Study	Complications	Risk Estimate
Assendelft, Bouter, Knipschild (1996)	Vertebrobasilar accident	From 1/20,000 patients to 1/1 million cervical manipulations
	Cauda Equina Syndrome	1/1 million treatments
Dvorak, Orelli (1985)	Major complications	1/400,000 manipulations
	'Slight' neurological complications	1/40,000 cases
Haynes (1994)	'Stroke'	<5/100,000 patients receiving neck manipulation
Gutman (1983)	Vertebrobasilar accident	2-3/1 million cervical manipulations
Henderson, Cassidy (1988)	Vertebrobasilar accident	1/1 million manipulations
Shekelle et al (1992)	Cauda Equina Syndrome	1/100 million manipulations

The practice of thrust manipulation of the spine is performed by:

- medical practitioners;
- chiropractors;
- osteopaths; and
- physiotherapists.

The Chiropractors and Osteopaths Act 1979 restricts the practise of chiropractic and osteopathy to registered chiropractors and osteopaths. Physiotherapists and medical practitioners are exempted from that restriction, allowing them to also practice chiropractic and osteopathy, which is defined as: the manipulation, mobilisation and management of the neuromusculoskeletal system of the human body.

Reproduced from the New South Wales Health Department Review of the Chiropractors and Osteopaths Act 1991, Issues Paper (June 1998)

Benefits and Costs of the Core Practices Model

Implementation of a core practices model for the practice of thrust manipulation of the spine will:

- provide a definition of the restricted core practice of thrust manipulation of the spine;
 and
- restrict the performance of the practice to medical practitioners, osteopaths, chiropractors and physiotherapists. Title protection will continue for these practitioner groups.

The Review Team considered that implementation of the core practices model would benefit consumers through:

- maintenance of current levels of consumer protection;
- increased price competition in areas where practice restrictions will be removed for example mobilisation and management of the neuromusculoskeletal system, manipulation (other than thrust manipulation of the spine), mobilisation and assessment of abnormalities of movement or posture;
- improved consumer choice; and
- improved consumer information.

The core practices model will continue to protect consumers from the risk associated with the practice of thrust manipulation of the spine. The core practices model removes restrictions on low risk practices and retains restrictions on who may practice spinal manipulation. Registration requirements and title restriction are the same as the current legislative arrangements. Non-legislative consumer protection arrangements implemented by the professional Associations will continue under the core practices model. For practices other than thrust manipulation of the spine, the risk of harm is minimal and therefore a similar level of restriction to that applying to thrust manipulation of the spine should not be required in order to achieve the objectives of the legislation.

An increase in competition is theoretically achievable with the implementation of a core practices model for thrust manipulation of the spine. The removal of restrictions will enable some practitioners to increase their current scope of practice leading to increased competition and consumer choice. This should be possible for practices, other than the practice of thrust manipulation of the spine, performed by physiotherapists, chiropractors and osteopaths. However, the impact of increased competition on market incumbents is difficult to assess and will ultimately depend on changes in consumer demand patterns. It was concluded that the potential impacts on chiropractors, osteopaths, physiotherapists and medical practitioners would be minor.

Implementation of a core practices model will potentially improve consumer information about the type and quality of service provided by practitioners. The current practices of physiotherapists, chiropractors and osteopaths (aside from spinal manipulation) will be open to alternative providers under the core practices model. There is therefore the potential for the current practitioner groups to undertake initiatives to distinguish their services within the market to promote each profession's scope of practice.

Reflecting these considerations it was concluded that implementation of the core practices model would produce the potential benefits of increased price competition, consumer choice, and consumer information. However, it was thought that such benefits would be minor.

It was concluded that under a core practices model there will be some minor reduction in enforcement costs incurred by regulatory authorities and other government bodies due to reduced levels of legislative practice restriction.

Benefits and Costs of the Title Only Model

The title only option moves further along the de-regulation continuum by removing restrictions relating to thrust manipulation of the spine in addition to the other practice restrictions removed under the core practices model. Only title protection would be provided within the Acts.

It is possible that the benefits from competition under the title only model will be greater than those of the core practices model given that all practice restrictions will be removed. As in the case of the core practices model, there will be increased competition in practice areas outside of thrust manipulation of the spine, where practice restrictions have been removed, and also in the case of thrust manipulation of the spine where the practice definition has been removed and only title protection exists. As with the core practices model, any change in competition would depend on changes in consumer demand patterns. However, it was concluded that any additional benefits from competition are likely to be small given the established purchasing patterns of consumers.

There are risks of harm associated with the practice of spinal manipulation. Based on assessment of the practices of currently registered practitioners, the probability of these risks occurring is relatively low. Given that under the title only model there is the possibility of unqualified service providers and despite the fact that there are established consumer purchasing patterns the incidence of harm may increase. This increase will be attributable to the increased likelihood that unqualified persons, either persons not currently registered and/or permitted to practice under the base case, will enter the market.

It was considered that under a title only model there would be less consumer protection and the potential for higher risk of harm if consumers seek treatment from unsafe practitioners within the market.

Implementation of the title only model does not benefit the market incumbents. With the exception of medical practitioners, where only title protection currently exists, the current statutory definitions of practice will be removed. The title only model therefore extends the potential for competition into the restricted practice of the thrust manipulation of the spine. As with the core practices model, there maybe an incentive for practitioners to distinguish themselves from alternative practitioners.

The title only model provides alternative practitioners with an increased scope of practice through the removal of current practice restrictions. The key difference between the title only model and the core practices model is that the additional benefits of extended practice scope will extend to the practice of thrust manipulation of the spine. However, it was concluded that the impact on market incumbents from implementing the title only model, whilst greater than the core practices model, would be minor.

The title only model has the potential to further reduce current enforcement costs for regulatory authorities and other government bodies from the core practices model because of the removal of all practice restrictions and the retention of only title protection. However, the workload of the Health Rights Commission, may increase if consumer complaints increase in line with expanded alternative service provision extending to thrust manipulation of the spine. On balance, it was concluded that the impact of the implementation of the title only model on the costs of regulation would be neutral.

Conclusions - Thrust Manipulation of the Spine

The Review Team found from its analysis of the current legislative arrangements that consumer protection has been achieved but there are potential costs associated with achieving that objective.

Due to the risk of harm associated with thrust manipulation of the spine, consumer protection benefits can be achieved from defining thrust manipulation of the spine as a core practice. Benefits from increased competition will also be achieved, as all practices except thrust manipulation of the spine will be open to market competition. Under the title only model there is an increased probability of consumer harm due to the entrance of new participants within the industry. This increase of harm is attributable to the increased likelihood that unqualified persons will enter the market.

The core practices model does not provide any direct benefits for incumbent professions. Where competition increases from alternative providers, a minor redistributive effect will occur impacting on businesses of market incumbents. The beneficiaries are consumers and alternative service providers.

Under a title only model the benefits from competition are heightened. The restrictions on thrust manipulation of the spine, which would be present in the core practices model, would be removed as part of the implementation of the title only model. However, there is the potential for consumers to incur higher rates of harm through seeking treatment from unsafe practitioners within the market. There is therefore an issue as to whether such competition,

and consequent benefits, are sustainable in the long term. It was concluded that the competition benefits of the title only model would be minor.

As with the core practices model, the title only model will not benefit incumbent practitioners. A title only model has the potential to reduce current levels of profitability for physiotherapists, chiropractors and osteopaths.

As with the core practices model, the title only model provides alternative practitioners with an increased scope for practice through the removal of practice restrictions prescribed under the current legislation. This change has the potential to increase current employment levels for alternative practitioner groups.

Under a core practices model it is anticipated that there will be a reduction in enforcement costs incurred by regulatory authorities and other government departments. Implementation of the title only model is likely to be cost neutral.

Taking into account these considerations it has been concluded that there are grounds, in terms of public benefit, to implement the core practices model for thrust manipulation of the spine.

Findings - Prescription of Optical Appliances for the Correction or Relief of Visual Defects

The Optometrists Act 1974 restricts the practice of optometry to optometrists and medical practitioners. Optometry is defined in the Act as that branch of science concerned with the investigation of the functions of vision and with the prescribing, fitting or servicing of optical appliances for the correction or relief of visual defects due to anatomical or physiological variations without recourse to medicine or surgery.

The practice of prescribing of optical appliances is performed by:

- medical practitioners; and
- optometrists.

General practitioners perform preliminary testing for visual conditions. These tests enable the practitioner to conduct a preliminary assessment of the patient's condition and ascertain the need for further investigation. Dependent upon the diagnosis, the practitioner may refer the patient to either an optometrist or ophthalmologist. Ophthalmologists provide consumers with services ranging from treatment for cataracts, glaucoma, retinal problems, eyelid problems, corneal diseases to general eye testing and surgery.

Optometrists perform examinations of the eye to investigate visual function and the health of the eyes. These investigations involve a number of routine tests in conjunction with tests dependent on the patient's symptomatology, observations and the practitioner's initial findings.



Benefits and Costs of the Core Practices Model

The core practices model would restrict the prescription of optical appliances to optometrists and medical practitioners. Title protection will be provided to registered optometrists and medical practitioners.

Implementation of the core practices model will maintain levels of consumer protection. The core practices model would include similar restrictions to those that currently apply to prescription activities. Non-legislative consumer protection arrangements supported by the Optometrists Association of Australia will continue under the core practices model.

Implementation of the core practices model is unlikely to impact on optometrists and medical practitioners. In terms of the core practice of prescription, there will be no change from the restrictions of the current legislation. A definition of prescribing will apply and the practice will be restricted to medical practitioners and optometrists. Prices will continue to be guided by the Medicare schedule.

Implementation of the core practices model may have minimal impact on incumbent practitioners. The degree of impact will depend on business structures. Theoretically, other practitioners will be able to increase their current scope of practice because prescription would be the only restricted practice.

Restrictions on other activities will be removed, creating the theoretical potential for competition. However, because there is already competition in the market in activities other than prescribing, the core practices model would be consistent with the base case and would have negligible impact on competition.

Under a core practices model it is anticipated that there will be a minor reduction in enforcement costs incurred by regulatory authorities and other government bodies due to reduced levels of regulation.

Benefits and Costs of the Title Only Model

Under a title only model only registered practitioners would be permitted to use professional titles. There would be no restrictions on who could prescribe optical appliances, nor on any other practices. Restrictions on the practice of prescription would therefore be removed under this model.

While it is not currently anticipated that in the short term unqualified practitioners would seek to prescribe optical appliances, this would become possible under a title only model. There would be a risk of harm to consumers from inaccurate or incomplete assessment and inappropriate prescribing by unqualified practitioners. The potential harms include deterioration of eyesight, failure to identify other health conditions (eg diabetes), and the risk of harm to third parties through, for example, traffic accidents.

Research conducted by the Optometrists Association of Australia indicates that consumers have difficulty distinguishing between optometrists, ophthalmologists and optical dispensers. Consumers would therefore be likely to have difficulty identifying the appropriate practitioner to consult for an optical prescription if it was an unrestricted practice.

The potential for competition is greater under the title only model, due to all practice restrictions being removed. However, it is unlikely that any potential benefits from competition are material or sustainable.

The title only model could possibly represent a net cost for market incumbents and consumers due to the removal of practice restrictions. Whilst there is a potential pool of new entrants, these could be limited in number. However, to the extent that there is some competition this will have an impact on the profitability of market incumbents whilst for consumers, there would be the potential for increased risk of harm.

Implementation of the title only model could have a greater competitive impact on optometrists than the impact of the core practices model. However, in reality, any changes would be only marginal because there is limited scope for cost savings, and alternative optical prescribers are not expected to enter the market in the short term.

The title only model has the potential to reduce current enforcement costs for regulatory authorities and other government bodies. The removal of practice restrictions would mean that prosecution of people who practiced optometry would not be required. However, in light of the small number of prosecutions, the reduction in regulatory costs would be minimal.

Conclusions - Prescription of Optical Appliances for the Correction or Relief of Visual Defects

There is a risk of harm associated with prescription of optical appliances. The incidence of risks will increase if unqualified persons compete against qualified practitioners by prescribing optical appliances. There are benefits for consumer protection in specifically defining prescribing as a core restricted practice and quarantining it from exposure to competition.

In current market conditions, where most optometrists bulk bill to Medicare, there is no real price competition for optical prescribing services. Aside from a small improvement in regulatory efficiency, the core practices model will not alter the current market.

The title only model would theoretically create competition by allowing people other than optometrists to prescribe optical appliances. While new market entrants are not likely in the short term, there is a longer term possibility that non-optometrists would prescribe optical appliances, creating a risk of consumer harm from inappropriate prescribing.

Under both the core practices and title only models it is anticipated that there will be a reduction in enforcement costs incurred by regulatory authorities and other government departments.

The Review Team has concluded that implementation of the core practices model provides the greatest public benefit by removing unnecessary regulation and minimising risk for consumers and third parties.

Findings - Surgery of the Muscles, Tendons, Ligaments and Bones of the Foot and Ankle

The *Podiatrists Act 1969* restricts the practise of podiatry to podiatrists, and exempts medical practitioners (and treatment in hospitals in certain circumstances) from that restriction. Podiatry practice is defined in the Act to mean the *diagnosis and treatment by medical, surgical, electrical, mechanical or manual methods of ailments or abnormal conditions of the human foot.* The combined effect of this restriction, and reliance on restriction on the use of professional titles in the *Medical Act 1939* is to restrict "surgical" treatments of the foot to podiatrists and medical practitioners, and to impose no restriction on surgery to any other part of the human anatomy.

In assessing the practice of surgery to the muscles, tendons, ligaments and bones of the foot and ankle, the focus has been on two practitioner groups:

- orthopaedic surgeons; and
- surgical podiatrists.

Under the current legislative arrangements there is a statutory definition of practice (for podiatry only) and title protection. These arrangements are supported by non legislative arrangements implemented by some professional Association as a prerequisite of membership.

Benefits and Costs of the Core Practices Model

One issue to be addressed in the case of the core practices model is its practicality of implementation. There are considerable difficulties associated with attempting to define 'surgery'. While most people associate 'surgery' with invasive procedures performed by specialist medical practitioners, there are many procedures performed by other practitioners, which might be captured by a broad definition of 'surgery'. They include procedures undertaken by tattooists, acupuncturists, nurses, dentists, podiatrists and medical practitioners. These definitional problems mean that a core practices model is not an appropriate mechanism to restrict the practice of 'surgery' generally.

There is no current legislative restriction that prevents people other than medical practitioners from undertaking 'surgery'. Instead, legislation prevents a person who is not registered as a medical practitioner from calling themselves a "surgeon" (dental surgeons are exempted from this restriction).

The Review Team concluded that the application of a core practices model to restrict the practice of surgery of the muscles, tendons, ligaments and bones of the foot and ankle would produce an inconsistency with the regulation of other surgical procedures which would continue unrestricted other than through title protection.

There is minimal justification on health and safety grounds for restricting surgery of the muscles, tendons, ligaments and bones of the foot and ankle, given only medical practitioners and podiatrists would be permitted to undertake surgical treatment of the foot. There is little evidence of harm and it is difficult to foresee that consumer protection would be improved under a core practices model.

As the core practices model removes restrictions on podiatry practice, other than surgical procedures, other practitioners could theoretically practice podiatry. However there are few alternative providers who are likely to compete with podiatrists and medical practitioners in providing general podiatric practices. Any competition benefits to the consumer and impacts on podiatrists and their potential competitors would be minor.

The activities of the Medical Board of Queensland and the Podiatrists Board of Queensland would not be altered to any significant extent under the core practices model. The Boards would have an ongoing role in establishing and maintaining professional standards and ensuring compliance with the legislation by all registered practitioners. The regulatory role under the core practices model would be to enforce the core practice restriction on surgery of the muscles, tendons, ligaments and bones of the foot and ankle. It was concluded that there would be no impact on regulatory bodies from implementing the core practices model, however there would be inconsistencies in regulating the practice of surgery on the foot, but not the rest of the anatomy.

The core practices model would represent a net cost if applied to surgery of the muscles, tendons, ligaments and bones of the foot and ankle. It would reduce regulatory efficiency without any benefit to consumer protection.

Benefits and Costs of the Title Only Model

Under the title only model current market conditions for the practice of surgery will remain unchanged. However, restrictions on the practice of podiatry will be removed.

It was concluded that the restriction on who can use the title 'surgeon' has worked effectively as a mechanism to protect consumers of surgery. Any improvement in consumer protection, from the implementation of a title only model, would be dependent on restrictions on the use of the title 'surgeon' being enforced.

The title only model introduces the potential for alternative practitioners (to registered podiatrists) to increase their scope of practice. Whilst increased competition is theoretically possible, under the title only model, the key issues are whether it can emerge or whether it is sustainable. It was concluded in the analysis that the potential for increased competition was limited.

Under this option the Medical Board of Queensland and the Podiatrists Board of Queensland would continue to have the ability to discipline registered practitioners whose conduct is unsatisfactory or unprofessional. Also the Boards would have the capacity to prosecute unregistered practitioners who use a restricted title (e.g. 'podiatrist' or 'surgeon'). However, the Boards would not have jurisdiction in respect of unregistered practitioners who undertake surgery or practice 'podiatry', unless they use a restricted title. It was concluded that there would be a minor reduction in enforcement costs under the title only model.

There would be a net benefit in the title only model which retains current levels of consumer protection through restriction on the use of titles, and removes unnecessary regulation in non-surgical procedures on the foot.

Conclusions - Surgery of the Muscles, Tendons, Ligaments and Bones of the Foot and Ankle

In the case of surgery to the muscles, tendons, ligaments and bones of the foot and ankle, the title only model is the preferred option.

There are practical difficulties in implementing the core practices model. Successful implementation of the core practices model is reliant on a precise definition of the restricted core practice. It has been concluded that it was impractical to define surgery and that definitional problems mean that a core practices model is not an appropriate mechanism to restrict the practice of surgery generally.

There is minimal justification, for restricting surgery of the muscles, tendons, ligaments and bones of the foot and ankle under a core practices model. The incidence of harm from surgery is small and the consumer protection arrangements currently in place will continue. It is therefore difficult to foresee that consumer protection under a core practices model would improve.

A core practices model would lead only to theoretical improvements in competition in services providing surgery of the muscles, tendons, ligaments and bones of the foot. In view of the limited incidence of harm a core restricted practice of surgery of the muscles, tendons, ligaments and bones of the foot is unnecessary.

The title only model incorporates the benefits of the base case (in relation to surgery) and the benefits from removing practice restrictions from podiatry. There have been no reported complaints made to the respective Boards relating to the practice of surgery, indicating that current restrictions are meeting the consumer protection objectives of the legislation.

For these reasons, the title only model provides a net benefit by maintaining consumer protection, without the costs associated with inconsistent regulation of surgery of the foot and surgery on other parts of the anatomy.



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Introduc	tion

1.1 Background

Health practitioner legislation has been the subject of comprehensive review in Queensland.

In 1993 the Queensland Government initiated a review of health practitioner legislation – the Health Practitioner Registration Acts (HPRA) review. These Acts register and regulate a range of health professions including:

- chiropractors;
- osteopaths;
- dentists (including specialists);
- dental technicians;
- dental prosthetists;
- medical practitioners (including specialists);
- occupational therapists;
- optometrists;
- pharmacists;
- physiotherapists;
- podiatrists;
- psychologists; and
- speech pathologists.

The review proposed a core practices model for the regulation of the health professions. Implementation of this model would mean that any current broad statutory definition of practice would be removed and replaced with statutory restrictions on specific activities or procedures that pose a significant risk of harm to the public.

In 1996, the Queensland Government released a *Draft Policy Paper: Review of Medical and Health Practitioner Registration Acts*. A broad range of reform proposals were presented in the paper, covering professional registration requirements, restriction on the use of professional titles, complaints and disciplinary procedures, management of impaired practitioners, advertising, business operating restrictions, and practice restrictions. Legislative changes dealing with all of those issues, except business operating restrictions (the subject of a separate review) and practice restrictions, have been either implemented or introduced into the Queensland Parliament.

The *Draft Policy Paper* also canvassed, as a preferred policy position, the implementation of a core practices model to replace existing practice restrictions. Current practice restrictions are based upon broad definitions of the practice for some of the registered professions. The broadly defined practice is restricted to registrants and, in some cases, other registered professions are exempted from the restriction. There are currently broad practice definitions and restrictions on the practice of chiropractic and osteopathy, optometry, pharmacy, physiotherapy and podiatry. There are no definitions of practice or restrictions on the practice of medicine, occupational therapy, psychology or speech pathology.

This report represents another step in the review of the regulation of health practitioners and was commissioned to:

- further refine the core practices model contained in the Draft Policy Paper; and
- conduct a public benefit test (PBT). The core practices model involves restrictions of professional practice, which are potentially anti-competitive. A PBT of the benefits and costs of those restrictions is required under National Competition Policy (NCP).

The report has been structured in the following manner:

- Chapter 2 sets out the methodology for the review;
- Chapter 3 develops a risk of harm framework;
- Chapter 4 presents our findings on the refinement of the core practices model; and
- Chapters 5 to 7 present the results of the PBT analysis.



Review Methodology

2.1 Introduction

The review presented in this report was conducted in two stages.

Stage 1 of the Review focused on refining the core practices model contained in the *Draft Policy Paper* and involved developing a risk of harm framework to be used to identify practices that should be included in a core practices model.

This review required significant technical input. Two specialist advisers were included in the Review Team to provide this input:

- Professor Ken Donald of the Graduate School of Medicine, University of Queensland;
 and
- Tracy Spencer, Physiotherapist and adviser to the Department of Veterans Affairs.

Eight focus groups were also held covering the following broad practice areas:

- joint manipulation;
- rehabilitation therapy;
- optical therapy;
- physical therapy;
- pharmaceutical dispensing;
- foot and ankle 'surgery';
- other foot and ankle treatment; and
- psychological therapy.

Each group comprised members of the Review Team and various persons with experience relevant to the practices under consideration. Each focus group included various health practitioners, academics and registration Board representatives.

The purpose of each focus group was to utilise their technical expertise to examine issues relevant to a core practice model including:

- practical ways of defining each practice;
- the nature of the harm that particular practices pose, including any evidence to identify the risk of harm;

- the type of skills or competencies required by health practitioners to manage those risks;
 and
- the professions that might be in a position to manage those risks of harm.

Considerable technical information was supplied in, or as a result of, each focus group. The framework for discussion also helped some participants to recognise some of the means by which a core practice model might work and the type of practices which might be included in such a model. However, a consensus view was not sought from any focus group. The sole purpose of the focus groups was to receive technical input for the Review.

Stage 2 of the Review involved the conduct of a PBT. The core practices model involves restrictions of professional practice, which are potentially anti-competitive. A PBT of the benefits and costs of those restrictions is required under National Competition Policy (NCP).

In conducting the PBT the Terms of Reference required that for potential core practices the following regulatory alternatives be evaluated:

- the base case, representing a continuation of existing regulatory arrangements;
- a title only model where there would be no restrictions on the practices of professions other than restrictions on title. Only registered practitioners would be allowed to use specific professional titles; and
- a core practices model where there would be restrictions on specific practices, which
 pose significant harm for consumers. Restrictions on title would also continue under this
 model.

The PBT analysis involved two stages:

- an evaluation of whether each option meets the objectives of the legislation; and
- an identification of the costs and benefits applicable to the implementation of each option. This evaluation, of the costs and benefits, is based upon an incremental analysis
 that is, the costs and benefits associated with moving from the base case to a core practices model or the base case to a title only model.

Benefits and costs were identified in relation to a number of stakeholder groups: consumers; market incumbents; potential competitors to market incumbents and regulatory and other government authorities. The impacts that were canvassed for each stakeholder group included:

- Consumers: protection of the public through the provision of safe and competent health care services, cost of services, access to health care services and information asymmetry.
- Market Incumbents: business impacts i.e. professional indemnity insurance, employment, and training.
- Potential competitors to market incumbents: business impacts, employment and training.
- Regulatory/Government Authorities: the effectiveness of the regulatory framework in achieving the objectives of the legislation and costs of administering and enforcement.



Risk	of Harn



3.1 Definitions

The first step in developing a functional core practices model is to develop a framework for identifying and assessing those healthcare practices which are candidates for inclusion in such a model because they pose a significant risk of harm to the public. The three key concepts in such an assessment are risk, harm and risk of harm.

Risk

Risk is the possibility or likelihood of an outcome occurring. Risk is commonly expressed as a percentage chance of an outcome, for example 20%, or as another ratio (1 in 5 chance). Whilst a probability may relate to either a positive or negative outcome, the term risk is associated with negative outcomes.

Risk is sometimes confused with uncertainty. Uncertainty refers to situations in which the range of possible outcomes is known but the probability of those outcomes eventuating is unknown or unquantified.

Full sets of quantitative probabilities are usually only available for carefully controlled or theoretical environments. Healthcare is not such an environment and, as a result, it is uncommon for health practitioners or health policy makers to be in a position to rely solely on definitive quantitative information. Decision makers usually work with a mix of risk and uncertainty.

Harm

In the context of this report, harm refers to the range of negative outcomes (harmful consequences) that a healthcare consumer might experience in utilising the services of a health practitioner. This harm could derive from poorly performed or wrongly applied practices.

Clearly most consumers visit a health practitioner for the purpose of receiving beneficial outcomes, whether they are through cure or relief of a condition, diagnosis or confirmation of a condition, or confirmation of health. However, it is also a fact of health practice that almost all procedures will have some unavoidable side effects, for example, the illness associated with chemotherapy and radiotherapy. The core practices model cannot reduce the harm of side effects, rather it focuses on harm that may be avoided by restricting practices to particular professions.

Risk of Harm

Together the two terms risk and harm, refer to the probability of harmful consequences occurring. In some literature the single term risk is used to describe the risk of harm, capturing both the probability as well as the harmful consequence.

The benefits of particular practices are not captured within risk of harm. Risk of harm refers only to downside risk (the negative outcome). The focus of the core practices model is on managing and reducing downside risks only - risk mitigation.

Health practitioners and consumers will consider both downside and upside, weighing the likelihood of harm against the likelihood of success and making treatment decisions accordingly. The core practices model does not seek to optimise upside and downside risk.

3.2 Risk Assessment Frameworks

To assist with the development of a suitable risk of harm framework for the core practices evaluation the Review Team examined a number of risk assessment frameworks that have been utilised in the healthcare and related fields.

Many modern risk frameworks arise as part of risk management systems that seek, not only to identify risks, but also to establish systems and procedures that will reduce or control those risks. The focus of many risk management systems is on risk mitigation – the avoidance of downside risk. However, some risk management systems now form part of total quality management systems which means that risk management forms part of the process of optimising all outcomes rather than just focussing on risk mitigation.

Standards Australia

Standards Australia has a generic Risk Management Standard Australian/New Zealand Risk Management Standard AS/NZS 4360:1995. This standard provides a generic framework for users to apply to any particular risk management circumstance. It is also consistent with quality management systems.

The approach to risk management outlined in the standard involves:

- establishing context (establishing objectives, values and a language consistent with the type of risks under consideration);
- identifying risks;
- analysing risks;
- assessing risks;
- treating risks; and
- monitoring and reviewing.

The first step in the standard, of establishing context, is important for a generic standard, as it recognises that a user will need to specialise in their risk management approach to suit their situation. Importantly, it will involve establishing a language of risk consistent with the circumstances under review.

The main emphasis of the standard is for users to work through a structured process of investigation and solution design, requiring the risks of harm relevant to them to be identified and ranked. Solutions can then focus on those risks of harm only, rather than being ignored, or worse, having solutions applied that are not relevant.

As noted earlier, the core practices model is designed to only focus on significant downside risks. It is not intended to provide a holistic approach to healthcare. Therefore, the Australian Standard provides a broader solution framework than is required here. However, by specifying the steps in risk management the standard does force users to identify and document the risks that their organisation faces. This is the first step in moving towards a targeted, evidence based risk framework.

VEETAC

An example of an evidence based approach to risk assessment was the 1993 VEETAC Review on the partially registered professions². The purpose of that review was to examine the need for registration across a wide range of registered or partially registered professions, including health professions. The Review focussed on risk mitigation only.

The VEETAC Working Party used a three step process to its risk mitigation task, assessing:

- degree of risk the nature of the risk posed in terms of both the harm caused and the likelihood of it occurring;
- circumstances of risk the relative ability of the profession and its clients/users/customers to manage or accept those risks (essentially asking whether regulation could affect the circumstances); and
- desirability of registration whether registration is the appropriate response to managing risk.

Interestingly, VEETAC assumed no risk of harm and hence no need for registration, challenging participants to prove otherwise. Such an approach would be consistent with NCP, but would not necessarily be consistent with AS/NZS 4360 as a lack of evidence presented to VEETAC may not equate to a lack of a risk of harm from a particular profession.

Traditional Chinese Medicine

In 1996 the Victorian, New South Wales and Queensland health departments commissioned a study into Traditional Chinese Medicine (TCM)³, looking at whether TCM posed a significant risk of harm to the public and whether occupational regulation of Chinese medicine practitioners was required.

² VEETAC (The Vocational Education, Employment and Training Committee) Working Party on Mutual Recognition 1993, Report on the Review of the Partially Registered Occupations, May.

³ Bensoussan A & Myers S 1996, Towards a Safer Choice - The Practice of Traditional Chinese Medicine in Australia, Southern Cross University.

The TCM study categorised risks into those arising from the clinical judgement of the practitioner, the use of a Chinese medicine and the use of acupuncture. The study examined the interaction between TCM and western medicine and examined the risks that might arise when the two operate together or to the exclusion of each other.

The TCM study is of interest because the risk of harm profile developed was specific to TCM. The authors developed risk of harm categories based on their own view of what were relevant issues. This ensured that the subsequent risk of harm analysis and quantification were well targeted to the available information. This is consistent with the first step in AS/NZS 4360 – establishing a context.

Industry Commission

The Industry Commission (now the Productivity Commission) has undertaken a number of major policy studies involving risk management issues, including formal inquiries into workers compensation⁴ and occupational health and safety (OH&S)⁵.

The Commission conducts its formal inquiries from an economic perspective, looking at costbenefit trade-offs in regulation. It also tends to adopt a non-regulatory starting point, requiring the case to be made progressively for regulatory intervention.

Such an approach can be characterised as working in reverse to AS/NZS 4360. For example, in OH&S the Commission relied first on common law incentives, then on associated financial incentives (e.g. workcover premiums), then on generic outcome-based regulation and then and only then recommending direct intervention by specific regulation. By working in this way, the Commission will tend to define high risk matters as being those which cannot be managed efficiently by other means.

3.3 A Risk of Harm Framework for the Core Practices Model

Consistent with AS/NZS 4360, the first step in developing the risk of harm framework for the core practices model has been to establish a context. This follows on from the main message from the four examples discussed above: that a risk framework need only apply to relevant risks and that it is able to help identify efficient solutions.

The context for the proposed core practices model is that:

- it focuses on risk mitigation only;
- it seeks to control those practices that pose a significant risk of harm only;
- the Draft Policy Paper and supporting submissions identify the type of practices under consideration;

⁴ IC (Industry Commission) 1994, Workers' Compensation in Australia, Report No. 36, 4 February.

⁵ IC 1995, Work, Health and Safety, Report No.47, 11 September.

- the objective is to develop a working core practices model;
- the only control mechanism that a core practices model provides is restriction by profession; and hence
- the model is only feasible where restriction by profession can mitigate the risks.

The refinement of the core practices model was based on a risk of harm framework that required:

- identification of the nature of potential harm that is associated with each practice;
- evidence of the risk associated with a practice;
- description of the circumstances of that risk, whether caused by:
 - incorrect choice of practice by a health practitioner;
 - incorrect conduct of that practice; or
 - whether the risk of harm results from association with the practice rather than being a direct result of the practice; and
- whether restricting the practice to particular professions can mitigate the risk of harm.

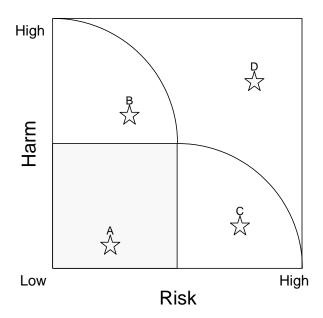
In examining available evidence the Review Team was also took into account the impact that existing legislative restrictions may have on outcomes. For example, existing legislation limits the prescription of corrective optical appliances to optometrists and medical practitioners only. As such, any lack of recorded incidences of harm arising from optical prescription could reflect:

- a 'protective' effect of the existing legislation; or
- a low risk of harm from the practice.

A similar situation arises for evolving areas of practice, where the novelty of the practice means that little or no data is available. An example encountered here related to cosmetic contact lenses. One solution in that case was to look to data from other jurisdictions.

A conceptual representation of the risk of harm framework is presented in the figure below. In the first instance, the 'risk' and 'harm' of a candidate practice are mapped onto a risk matrix. Only those falling into the top right area (e.g. point D) would be candidates for inclusion in the core practices model.

The relative scale of risk and harm in the diagram need not be linear. For example, very high potential harm practices (such as where the harm is death) may be candidates for restriction under the core practices approach even if the probability is very low. As such, the top right area is presented with curved boundaries.



Candidate practices for inclusion in a core practices model were identified in the *Draft Policy Paper* and the submissions to that Paper. As such, it was unnecessary to develop a framework to identify practices from first principles. The specific purpose of the framework is to locate those candidate practices that were identified in the *Draft Policy Paper* within the framework (i.e. conceptually to place them into the matrix). To do this, a set of filtering questions was developed that assist in determining whether a practice merited consideration as a core practice.

The questions, presented below in Table 3.1, were designed to *assist* the Review Team to determine whether the practice poses a prima facie risk of harm, whether, and to what degree, those risks are already subject to management by other means and whether restriction by profession might be a relevant approach. The questions were developed to be relevant across the range of healthcare practices under consideration in this Review – although noting that practices relating to psychology would require additional considerations.

The first four questions were used to identify both the nature and risk of the harm that a practice might pose. This included consideration of whether the risks were serious (e.g. threats to vital organs) and whether the risk was related to the practice or whether the risk was the result of potential subsequent actions. An additional consideration was harm to third parties which introduces broader public health and safety considerations into the assessment.

The fifth question considers whether consumers are in a position to identify and manage the risks of a practice, for example by recognising the skills needed and hence selecting or being directed toward the appropriate type of practitioner.

The sixth question examines the practicalities of defining the practice in legislation. A regulatory approach of this kind requires clear definitions that can be interpreted effectively and ensure that only the targeted practices are covered.

The seventh question considers whether specific controls exist already and, by implication, whether those controls can, or should, be able to manage the risks appropriately. It could be that a core practice approach is feasible for a particular practice but that it adds nothing to the management of the risks of that practice (and is therefore redundant).

The last question considers whether a broad range of practitioners already undertake the practice. At a prima facie level, the presence of many professions, especially where some are not registered, would suggest that the core practice model might not be appropriate.

Table 3.1: Prima Facie Filtering Questions

Question	"Yes" Core Practice candidate	"No" Core Practice candidate
1. Does the practice pose a realistic threat to vital organs (or structures) of the body?	X	
2. Is the practice invasive (e.g. surgery that penetrates the dermis)?	X	
3. Is death or total disablement a realistic (measured rather than theoretical) outcome?	X	
4. Do potential harms include harm to third parties?	X	
5. Does the practice appear to be an area of poor consumer knowledge?	X	
6. Is a legislated definition of the practice feasible?	X	
7. Is the practice subject to specific controls already (other than a restriction on practice)?		X
8. Is the practice already undertaken by a large number of different professions (e.g. >4)?		X

As a rule of thumb, if a practice were judged by the Review Team to answer to at least five of the eight questions, then it would be likely to be a *prima facie* candidate for inclusion as a core practice. However, it is important to understand that the decision process required judgement by the Review Team of the available evidence and that the questions were designed only to *assist* the Review Team in forming that judgement. The Review Team's conclusions were not simply based on number of designated answers. Indeed, it would be possible for a practice to answer to only one or two questions but still pass the *prima facie* consideration if, for example, the levels of harm were extreme.

Further, it was recognised that the questions were not fully relevant to practices relating to psychology, particularly vital organs or invasiveness. As a result these questions weighed less in the assessment of psychological issues.

The Review Team also examined more detailed evidence made available either at focus groups of professionals or through information furnished or collected in response to those focus groups.

The mapping of a practice onto the matrix occurred in the context of other healthcare regulation that may also manage risks. These include:

- health practitioner training, competencies and registration requirements;
- restrictions on the use of titles;
- consumer education (and empowerment); and
- various insurance, common law and statutory duty of care arrangements that may exist.



Core Practices Model



4.1 Background

The *Draft Policy Paper* proposed a number of potential core practices. These practices are outlined in Table 4.1.

Table 4.1: Draft Policy Paper Core Practices*

Core Practice	Registered Professions
Professional dispensing of medicines, mixtures, compounds and drugs (NB: This provision is not in derogation of Poisons Regulation)	Pharmacist Any other person authorised by the Pharmacy Board of Queensland
Prescribing of optical appliances for the correction or relief of visual defects and the fitting of contact lenses	Optometrist Medical practitioner
Moving the joints of the spine beyond a person's usual physiological range	Chiropractor Osteopath Physiotherapist Medical practitioner
Soft tissue surgery and nail surgery of the foot	Podiatrist Medical practitioner Nurse
Surgery (not otherwise restricted above)	Medical practitioner Other authorised person

Note: Dental practices were also considered as a potential core practice. An examination of the regulation of dental practices is the subject of a separate PBT report.

This list was subsequently expanded by the inclusion of practices proposed in the submissions made to Queensland Health on the *Draft Policy Paper* in 1997. Many of these additional practices, and those identified by the focus group participants, were discussed in focus groups for clarification. However, in most cases, their consideration was not progressed by the Review Team. While these (and all) health care practices pose some risk of harm, the feasibility of their inclusion in the core practices model was low due to failing to meet the prima facie requirements set out above. This included issues of insignificant levels of harm, obvious difficulties in definition and the ability of consumers to manage the harm themselves. Through the focus group discussions it became obvious to the Review Team that these additional practices would fail to answer even more than one or two of the questions posed in Table 3.1.

The specific practices not considered further were:

- joint manipulation:
 - manipulation of joints other than the spine rehabilitation therapy;
 - design and fit of splints;
 - functional aids;
 - functional capacity evaluation;
 - home and environmental modifications;
 - rehabilitation case management; and
 - driving assessments;
- optical therapy:
 - supply of contact lenses (as distinct from prescribing or fitting lenses, which are discussed later);
- physical therapy:
 - electrotherapy (electrical therapeutic equipment has already been cleared for sale by the Therapeutic Goods Administration (TGA) through its own risk assessment procedures which includes consideration of public safety.
 - The use of non-ionising radiation (ultrasound, laser, microwave, ultraviolet etc.) in Queensland is currently regulated by the *Radiation Act 1999*. The Act restricts the use of ionising and non-ionising sources of radiation via licensing, supply restrictions, compliance monitoring, investigation and enforcement and has established the Radiation Advisory Council.
 - applying stretch and pressure to soft tissue (a practice undertaken by almost all members of the community);
- foot and ankle treatment:
 - supply and fit of foot orthoses (some of which can be bought off the shelf); and
- psychological techniques:
 - therapeutic hypnosis (the government has decided not to restrict hypnosis in the Psychologists Registration Bill 2000, which is proposed to replace the Psychologists Act 1977).

The additional practices that were included for further consideration were:

- the administration and interpretation of psychological tests;
- the administration of psychotherapy; and
- assisted feeding of persons with neurological impairment.

4.2 Developing a Core Practices Model

Taking into account the issues outlined above, the following practices were reviewed as part of the refinement of the core practices model:

- moving of the joints of the spine beyond a person's usual physiological range;
- assisted feeding;
- prescription of optical appliances for the correction and relief of visual defects and the fitting of contact lenses;
- professional dispensing of medicines, mixtures, compounds and drugs;
- soft tissue surgery and nail surgery of the foot;
- surgery (not otherwise restricted above);
- the administration and interpretation of psychological tests; and
- the administration of psychotherapy.

Each practice was subject to a systematic assessment, summarised in the following analysis.

Moving the Joints of the Spine Beyond Usual Physiological Range

After discussion with the focus group, manipulation of the spine was identified as the highest risk procedure. There was consideration of the manipulation of other joints but the range of potential harm was considered insufficient to warrant further consideration. Technical input from the focus group was in general agreement with this limitation.

Focus group input

The focus group included persons with expertise in physiotherapy, chiropractic, osteopathy, massage therapy and orthopaedics.

The first issue considered was a definitional range for manipulation of the spine. A range of parameters was raised including the relevance of:

- therapeutic intent;
- manual or mechanical thrust, to take account of the range of ways in which the manipulation could occur;
- cavitation, which involves the creation of a vacuum in a joint (this terminology is not recognised by all professions); and
- high or low velocity movement and/or traction.

The risks of spinal manipulation were considered to include spinal damage and damage to arteries of the neck, which can induce neuro trauma. The focus was on possible outcomes where manipulation is poorly conducted or applied to patients with complicating conditions. Potential outcomes included:

- induced strokes (and death);
- fractures:
- disc injuries;
- spinal injury (which could lead to disablement);
- soft tissue tears; and
- bleeding.

The focus group discussed the competencies required to mitigate these risks. While the physical capability to undertake a manipulation was an obvious requirement, the range of skills required by a practitioner to make a diagnosis and select the use of manipulation of the spine as a treatment was more significant. This required a broad base of anatomical, physiological, biomechanical and pathological knowledge, as well as the clinical skills that lead a practitioner to a diagnosis.

Recognising the type of definition provided, the following professions were identified as currently engaging in manipulation of the spine:

- chiropractors;
- osteopaths;
- medical practitioners; and
- physiotherapists.

Massage therapists indicated that they did not engage in activities that would fall within the definitional parameters. It was also noted that while manipulation of the spine was a central part of chiropractic and osteopathy, it was not necessarily central to all medical practitioners. Most orthopaedic surgeons would be involved in manipulation of the spine from time to time, as might many general practitioners and general surgeons.

Prima facie analysis

The Review Team agreed that manipulation of the spine should be subject to consideration as the range of harm was sufficient to warrant further investigation.

In respect of the filtering questions the Review Team conclusions were:

- Does the practice pose a realistic threat to vital organs (or structures) of the body? *Yes, the practice involves direct thrust to the spine.*
- Is the practice invasive (e.g. surgery that penetrates the dermis)? *No*.
- Is death or total disablement a realistic (measured rather than theoretical) outcome? *Yes, both stroke and para/quadraplegia are associated with the spinal damage.*
- Do potential harms include harm to third parties? *No.*
- Does the practice appear to be an area of poor consumer knowledge? No, the Review Team considered that the public is generally aware of the importance of the spine. Further the public utilise the services of a range of practitioners for spinal manipulation purposes, indicating that they have some degree of knowledge of the range of practitioners available.
- Is a legislated definition of the practice feasible? Yes.
- Is the practice subject to specific controls already (other than a restriction on practice)? No, spinal manipulation is only subject to the controls applying to registered practitioners and others in the community more generally.
- Is the practice already undertaken by a large number of different professions (e.g.>4)? No (borderline). The practice under consideration is undertaken by four disparate professions as outlined above, including a range of specialisations within the medical practitioner profession.

The Review Team found that the practice of spinal manipulation answered to five of the eight questions and therefore warranted further consideration. These considerations involved examining the evidence made available on the dangers of spinal manipulation.

Discussion

As part of the process the Review Team collected a range of information from focus group participants.

The Australian Orthopaedic Association supplied the Review Team with a range of peer reviewed papers and abstracts concerning the potential harm of manipulation of the spine. Most of these papers examined the harms that could arise from the application of manipulations to the spine, particularly examining the serious harms of stroke and disablement. Some papers questioned the benefit of treatment by manipulation. However the efficacy of treatment type is not considered in this review.

The evidence presented clearly documented that there are realistic threats to the spine and spinal cord as a result of manipulation of the spine. However, a large proportion of the evidence relates to the examination of cases of severe harm, rather than identifying the risk or probability of those outcomes occurring from cases of spinal manipulation.

For example, a 1995 study by Lee et al⁶ examined the cases of neurologic complication following chiropractic manipulation that had been treated subsequently by Californian members of the American Academy of Neurology. This study revealed 55 strokes, 16 myelopathies and 30 radiculopathies arising mostly from cervical manipulation. While this data indicates that manipulation could be associated with such outcomes, causality could not be shown. Nor were the incidences put into perspective against the total number of manipulations or compared with other 'causes' of such outcomes.

A 1999 study by Haldeman, Kohlbeck and McGregor⁷ examined English language literature to identify cases and causes of reported vertebrobasiliar artery dissection and occlusion, a rare but severe incidence that can result from spinal manipulation. In essence this incidence involves a blockage or cut to the vertebrobasiliar artery which would then cut blood supply to the area of the brain that controls respiratory and cardiac function. The study found 367 cases, of which 160 were spontaneous onset, 115 followed spinal manipulation, 58 were associated with trivial trauma and 37 with major trauma. While this study identified spinal manipulation as a cause, the data also indicated that there are more spontaneous cases (which could, for example, mean that the incidence is triggered by a person turning their head) than those caused by manipulation. Further, rough estimates of the incidence of vertebrobasiliar artery dissection provided by Hurwitz⁸ and also by McGregor⁹ are suggested by Shekelle & Cherkin¹⁰ to be around 1 in 1 million manipulations.

⁶ Lee KP, Carlini WG, McCormick GF & Albers GW (1995), Neurologic Complications Following Chiropractic Manipulation: A Survey of California Neurologists, *Neurology* 45(6), 1213-1215.

Haldeman S, Kohlbeck FJ & McGregor M 1999, Risk Factors and Precipitating Neck Movements Causing Vertebrobasiliar Artery Dissection after Cervical Trauma and Spinal Manipulation, Spine 24(8) 785-794.

⁸ Hurwitz EL, Aker P, Adams AH, Meeker W & Shekelle PG 1996, Mobilization and Manipulation of the Cervical Spine: A Systematic Review of the Literature, Spine 21, 1746-1760.

⁹ McGregor M, Haldeman S & Kohlbeck FJ 1995, Vertebrobasiliar Compromise Associated with Cervical Manipulation, *Topics in Clinical Chiropractic* 2(3), 63-73.

¹⁰ Shekelle PG & Cherkin DC, full reference citation being sought.

A survey of Danish chiropractors by Klougart, Leboeuf and Rasmussen¹¹ estimated that cerebrovascular incidents occurred at a rate of one in 120,000 cervical treatments, with most incidents relating to treatment to the upper neck.

A 1998 study of complications from cervical manipulation by physiotherapists in New Zealand from 1991 to 1997 by Rivett and Reid¹² estimated that stroke occurred at the rate under one in 163,000 manipulations.

Conclusion

The Review Team noted that the evidence indicated that the practice of manipulation of the spine posed significant levels of harm, although the risk of that harm occurring appears to be relatively low. It was also identified that manipulations to the spine involving the applications of thrust movements possess the most risk. There was some question as to the use of the term manipulation, as it may imply different meanings for different professions. However, it was felt that the use of the term thrust, meaning 'push with sudden impulse or with force' would focus that part of the definition.

The information available did not show a reliable difference in risk between any of the four registered professions practicing spinal manipulation. However, the potential significant levels of harm meant that the practice has been included in the refined core practices model.

The Review Team has developed the definition presented below, which specifies those key practice elements that appear to be most closely associated with the risks of harm, that is, the manipulation by thrust of joints (not pressures that are directed to soft tissue) of the spine.

Core practice	Registered professions
Thrust manipulation of spine	Chiropractors Medical practitioners Osteopaths Physiotherapists

Assisted Feeding

While this focus group discussed a range of tasks relating to rehabilitation therapy, assisted feeding was the only one that appeared likely to be relevant to the core practices model.

Focus group input

The rehabilitation therapy focus group included persons from the occupational therapy profession only.

¹¹ Klougart N, Leboeuf-Yde C & and Rasmussen LR 1996, Safety in Chiropractic Practice, Part II: Treatment of the Upper Neck and the Rate of Cerebrovascular Incidents, *Journal of Manipulative and Physiological Therapeutics*, 19(9), 563-569.

¹² Rivett DA & Reid D 1998, Risk of Stroke for Cervical Spine Manipulations in New Zealand, New Zealand Journal of Physiotherapy, 26(2), 14-17.

The first issue considered was a definitional range of assisted feeding. The range of parameters raised included those relevant to:

- persons with a neurological impairment; and
- persons unable to feed themselves.

Assisted feeding was considered to pose harm by choking (death), brain damage and lung infection from ill-directed swallowing.

Much of the risk appeared to be theoretical, as the focus group members indicated that there are very few cases of persons suffering such outcomes.

The focus group discussed the competencies required to mitigate these risks. The key factor identified was to understand the abnormality or condition that limited the ability of a person to feed themselves.

It became clear that a very wide range of professions and persons engage in assisted feeding, including:

- occupational therapists;
- speech pathologists;
- physiotherapists;
- nurses;
- community care workers; and
- parents and families of persons requiring assistance.

Prima facie analysis

The Review Team agreed that assisted feeding should be subject to consideration as a potential core practice because of the potential harm.

In respect of the filtering questions the Review Team considered:

- Does the practice pose a realistic threat to vital organs (or structures) of the body? *Yes, the practice can involve blockage of the windpipe.*
- Is the practice invasive (e.g. surgery that penetrates the dermis)? *No*.
- Is death or total disablement a realistic (measured rather than theoretical) outcome? Yes, death is clearly a possible outcome were assisted feeding to be mishandled or unavailable, although no evidence was presented to document such outcomes.

- Do potential harms include harm to third parties? *No*.
- Does the practice appear to be an area of poor consumer knowledge? Yes, a person requiring assistance is ordinarily not able to select their carer.
- Is a legislated definition of the practice feasible? Yes.
- Is the practice subject to specific controls already (other than a restriction on practice)? *No.*
- Is the practice already undertaken by a large number of different professions (e.g.>4)? Yes. The practice under consideration is known to be undertaken by many professions and persons, including lay carers.

The Review Team found that the practice of assisted feeding answered to five of the eight questions, indicating that it warranted further consideration as a core practice.

Discussion

Members of the focus group commented that while choking incidents were known to occur, they were not aware of any studies into such incidents. Further, it was recognised that despite the wide range of persons engaging in the practice, many of whom were not members of registered professions, there were no significant cases of choking causing death or other serious adverse outcomes.

It also became clear to the Review Team that assisted feeding required a set of mechanical skills, but not a broad range of diagnostic skills as the condition and needs of the patient were already determined.

Conclusion

The Review Team considered that while assisted feeding was a potentially harmful activity, there was insufficient evidence presented to support its inclusion as a core practice. Further, the wide range of persons engaging in assisted feeding meant that there would need to be a very strong evidence based case to restrict the practice.

Prescribing Corrective Optical Appliances and Fitting Contact Lenses

The potential core practices considered were:

- prescription of optical appliances (of any type) for corrective purposes; and
- fitting of contact lenses.

Focus group input

The optical therapy focus group included persons from the optometry profession.

The first issue considered was the definitional range for the prescription of corrective optical appliances. The parameters discussed included:

- assessment, interpretation and other stages that lead to a prescription;
- application to all 'corrective' appliances including those that correct or relieve visual defects; and
- optical appliance defined under the *Optometrists Act* 1974.

The second issue was the definitional range for the fitting of contact lenses. Fitting, in addition to moulding (i.e. refinement of structure), of a lense to the eye can also include instruction and demonstration of how to put on, wear and manage lenses. Contact lenses can cause harm if consumers were not properly advised. The key parameter was that the practice includes both corrective and non-corrective (cosmetic) lenses.

The harmful effects of optical appliances related to:

- deterioration of a consumer's eyesight of a wrongly chosen or designed optical appliance;
- effects on third parties of poor eyesight (e.g. traffic accidents); and
- damage to the eye of poorly fitted contact lenses, such as cuts or infection.

Focus group members also raised the prospect that optometrists could detect diseases of the eye and other diseases (e.g. glaucoma and diabetes). This logic suggests the loss of diagnostic opportunities if consumers were not required to obtain optical appliances via an optometrist (or ophthalmologist).

While the Review Team recognises that some diseases can be detected through the eye, this is considered to be a potentially spurious argument as the same diseases can also be detected by a range of other practitioners. Further, if a disease such as glaucoma were to pose a significant public health issue then direct approaches such as community screening might be more appropriate – a core practices model *may* be an indirect and inefficient way of managing glaucoma.

Further information was provided on contact lenses, as increased promotion and sales of cosmetic contact lenses, especially to young females (who are unlikely to have prior experience with optical appliances) is expected. This information is discussed further below.

The focus group discussed the competencies required to mitigate these risks. Prescription was considered to require the broad base of anatomical, physiological, optical science, optometric and pathological knowledge, as well as the clinical skills that lead a practitioner to a diagnosis.

The following professions were identified as currently engaging in prescribing corrective optical appliances:

- optometrists; and
- medical practitioners (ophthalmologists).

It was noted that nurses and orthoptists would, under direction, undertake some of the tasks leading to a prescription.

The following professions were identified as currently engaging in fitting contact lenses:

- optometrists;
- medical practitioners (ophthalmologists);
- optical dispensers;
- consumers themselves; and
- pharmacists.

Prima facie analysis

The Review Team agreed that the two optometric practices were worthy of further investigation.

In respect of the filtering questions the Review Team considered, for <u>prescribing corrective optical</u> appliances:

- Does the practice pose a realistic threat to vital organs (or structures) of the body? *No.*
- Is the practice invasive (e.g. surgery that penetrates the dermis)? *No*.
- Is death or total disablement a realistic (measured rather than theoretical) outcome? *Yes*, *see below*.
- Do potential harms include harm to third parties? Yes, for example through traffic accidents.

- Does the practice appear to be an area of poor consumer knowledge? No, the Review Team considered that the public is generally aware of the importance of vision and the eyes and the role of practitioners in this field.
- Is a legislated definition of the practice feasible? *Yes*.
- Is the practice subject to specific controls already (other than a restriction on practice)? No, following a separate National Competition Policy review of ownership arrangements, Cabinet has decided to remove restrictions on ownership of optometry businesses.
- Is the practice already undertaken by a large number of different professions (e.g.>4)? *No.*

The Review Team found that the practice of prescribing corrective optical appliances answered to three of the eight questions. Ordinarily this might not warrant further consideration. However, the presence of potentially significant third party danger meant that the practice warranted further consideration.

In respect of the filtering questions the Review Team considered, for <u>fitting contact lenses</u>:

- Does the practice pose a realistic threat to vital organs (or structures) of the body? *No.*
- Is the practice invasive (e.g. surgery that penetrates the dermis)? *No*.
- Is death or total disablement a realistic (measured rather than theoretical) outcome? *No.*
- Do potential harms include harm to third parties? *No.*
- Does the practice appear to be an area of poor consumer knowledge? Yes, the availability and implications of cosmetic contact lenses is not widely known. Consumer awareness of the implications of their use has not developed (that is not to say that it will not be able to develop).
- Is a legislated definition of the practice feasible? Yes.
- Is the practice subject to specific controls already (other than a restriction on practice)? Yes, all contact lenses are listed by the Therapeutic Goods Administration (TGA).
- Is the practice already undertaken by a large number of different professions (e.g.>4)? *Yes*.

The Review Team found that the practice of fitting contact lenses answered to only two of the eight questions. As such it was difficult to consider this for inclusion in the core practices model. However, the Review Team still examined the information presented by focus group members in respect of cosmetic lenses.

Discussion

Much of the information presented to the Review Team related to the incidence in the population of vision defects. This information demonstrates the demand in the community for optical therapy services, but provides no guidance on whether or how prescribing rights should be restricted.

The Review Team notes that a key consideration in optical prescribing is the risk of third party harm. Of particular note is the fact that driver's licences can mandate the use of optical appliances in an effort to reduce the risk of traffic accidents from impaired vision. It is not clear what the implications of prescribing rights regulation would be on those risks.

Confidential information provided in respect of cosmetic contact lenses indicates that there is likely to be a significant marketing push in Australia, particularly directed at young females. This has begun through women's magazines. The Review Team also confirmed by inspection that internet supplies of cosmetic contact lenses (and prescription contact lenses) are available from sites in Australia and overseas.

It is clear from the information provided that cosmetic lenses tend to be soft lenses, which have a reduced risk of piercing the eye when incorrectly fitted. However, these lenses do pose a risk of microbial infection as they create an environment suited to microbial activity. Cases of corneal ulcers and other reaction are also documented¹³.

Of more interest to the Review Team was information on the incidence of such harm. A 1991 study by MacRae et al¹⁴ examined the incidence of ulcers and other complications that threatened but did not necessarily cause sight loss. That study showed adverse reaction per patient year (years worn) ratios of well over 1/100 for most types of contact lenses.

These results show that the incidence of problems with soft lenses is higher than for hard lenses, due to the environment they create The risks and reactions above relate to potential sight threats not actual sight loss. It is also mentioned in the study that there are simple methods, relating to lens cleaning and washing, available to reduce the risks.

¹³ Snyder RW, Brenner MB, Wiley L, Yee RW, Gradus MS & Mackman GS 1991, Microbial Keratitis Associated with Plano Tinted Contact Lenses, Contact Lens Association of Ophthamologists Journal, 17(4), 252-255.

MacRae SM 1987, Contact Lens as a Corneal 'Time Bomb', Research to Prevent Blindness Science Writers Seminar.

MacRae SM et al. 1991, Corneal Ulcer and Adverse Reaction Rates in Premarket Contact Lens Studies, American Journal of Ophthalmology 111, 457-465.

Conclusion

The Review Team considered that the traffic accident implication of optical appliance prescription warrants the inclusion of prescribing in the refined core practices model.

The inclusion of contact lens fitting is not supported as the level of harm does not appear to be significant and less restrictive means of reducing the risks associated with soft cosmetic lenses are available. It is also observed that all contact lenses are listed with the TGA and that as such their availability has already been examined under a risk assessment framework.

In this core practice, "optical appliances" has the same meaning as in the *Optometrists Act* 1974, - an appliance designed to correct, remedy or relieve a defect of sight, but does not include an eye cover or bandage.

Core practice	Registered professions
Prescribing optical appliances for the correction or relief of visual defects	

Pharmaceutical Dispensing

The potential core practice considered relates to the professional dispensing of restricted pharmaceuticals.

Focus group input

The pharmaceutical dispensing focus group included persons with expertise in hospital and community pharmacy.

The definitional range covered dispensing and included the following activities:

- preparation;
- safe storage;
- provision of clinical instruction;
- evaluation of therapy; and
- evaluation of interactions.

The key element here is that 'dispensing' is meant to differ from mere 'supply' through value added services. However, 'dispensing' is defined in Appendix 9 of the *Health (Drugs and Poisons Regulation) 1996* as 'sell on prescription' and supply is defined as not including 'administering, dispensing or prescribing the drug or poison but does include offer to supply'.

The focus group discussed the competencies required to mitigate risks. As the list above indicates, dispensing has a broad range of characteristics beyond supply. The clinical evaluation side of dispensing shares some of the skills of prescribing which medical practitioners hold.

While it was asserted in the focus group that only pharmacists have the ability to dispense (in terms of the skill and competency rather than the legal right), medical practitioners and nurses were also identified as having very close interests in dispensing. Therefore, the group of practitioners identified as undertaking this core practice included:

- pharmacists;
- medical practitioners; and
- nurses.

Prima facie analysis

The Review Team agreed that dispensing involved significant potential harm and was worthy of further investigation.

In respect of the filtering questions, the Review Team considered, for pharmacy:

- Does the practice pose a realistic threat to vital organs (or structures) of the body? Yes.
- Is the practice invasive (e.g. surgery that penetrates the dermis)? *No*.
- Is death or total disablement a realistic (measured rather than theoretical) outcome? Yes.
- Do potential harms include harm to third parties? *No, not directly.*
- Does the practice appear to be an area of poor consumer knowledge? No, the Review Team considered that the public is generally aware of the implications of pharmaceuticals use, although perhaps sometimes not sufficiently aware.
- Is a legislated definition of the practice feasible? *Yes*.
- Is the practice subject to specific controls already (other than a restriction on practice)? Yes, there are clear limitations in the Health (Drugs and Poisons Regulation) 1996.

• Is the practice already undertaken by a large number of different professions (e.g.>4)? Dispensing as defined under the Health (Drugs and Poisons Regulation) 1996 is limited to pharmacists but various levels of value-added supply of drugs are also provided by other persons.

The Review Team found that the practice of dispensing answered yes to only four of the eight questions. Ordinarily this may not warrant further consideration. However, the extent of harm of pharmaceutical misuse meant that the practice warranted further consideration.

Discussion

The first point of investigation was the relationship between the *Health (Drugs and Poisons Regulation) 1996* and the *Pharmacy Act 1976* (the Pharmacy Act), which currently restricts the professional dispensing of drugs.

The *Pharmacy Act* limits the practice of pharmacy to registered pharmacists. Pharmacy is defined as the professional dispensing of medicines, mixtures, compounds and drugs, and where appropriate the sale of items of trade and the provision of services (value-adding) in conjunction with professional dispensing. The Pharmacy Act does not define professional dispensing.

Section 42 of the *Pharmacy Act 1976* ensures that the Act operates in addition to, not in derogation of, the *Health (Drugs and Poisons Regulation) 1996*. The regulations form part of the suite of State and national regulation of drugs and poisons, central to which is the clearance of drugs and therapeutic appliances for sale. This includes provision to restrict certain substances to sale/supply etc. only by certain classes of persons such as pharmacists, medical practitioners, nurses, etc.

The *Health (Drugs and Poisons Regulation) 1996* defines dispensing as "selling on prescription" and the regulations include provision for supply of dispensed medicines by nurses, doctors and veterinary surgeons. Doctors are also permitted to dispense to their own patients, from their own premises, but not to set up retail pharmacy outlets.

An example of the detail of operation of the *Health (Drugs and Poisons Regulation)* 1996 is provided through an examination of the provisions relating to controlled drugs (one of the categories of drugs covered in the regulation).

Section 51 of the regulation provides that no person can possess, obtain, dispense, issue, prescribe, sell or administer a controlled drug unless they hold the appropriate authority. Sections 52 to 72 then describe particular authorities applying to particular persons and/or circumstances in which a controlled drug can be possessed, obtained, dispensed, etc. The authority may apply to only one or several of those terms. For example, section 58 authorises a doctor to obtain, possess, administer, dispense, prescribe and supply a controlled drug under certain circumstances. Section 62 permits a midwife to administer only under certain circumstances.

The regulation also provides for other authorities to be issued, including for example, to allow any supplying, dispensing, administering, etc to occur by other persons for a category of drug in rural and remote locations.

In considering the inclusion of dispensing in a core practices model, an important consideration is the extent to which the *Health (Drugs and Poisons) Regulation 1996* already provides for controls over the release and availability of drugs and medicines. The comprehensive and specific nature of the regulations did not encourage the Review Team to include dispensing in the core practices model. This is because it is not apparent what additional risk mitigation could be provided under a core practices model.

Further, it is known that the act of dispensing is *effectively* undertaken to varying degrees by parties other than pharmacists, i.e. medical practitioners and nurses, both of whom share liability for the medicines they prescribe and/or supply whether in hospital or in private practice. These persons are required to hold sufficient knowledge of drug interactions and drug functionality, thus such knowledge is not the sole domain of pharmacists.

Focus group participants provided some information to support the contention that pharmaceutical use poses significant risks of harm to the public. However, none of this information provided significant support for restricting dispensing to pharmacists only, given the parameters already set by the *Health (Drugs and Poisons Regulation)* 1996.

Conclusion

The Review Team considers that dispensing should not be included in the core practices model.

Surgery

The *Draft Policy Paper* identified two core practices for consideration:

- soft tissue surgery and nail surgery of the foot; and
- surgery (not otherwise restricted above).

'Surgery' was included in the analysis as a logical consequence of considering surgery of the foot as a restricted core practice.

Focus group input

While there was no focus group on general surgery, the surgical podiatry focus group included people with expertise in surgery, medical practice and surgical podiatry.

It was noted by the focus group that there are difficulties associated with precisely defining 'surgery'. Surgical practices potentially include simple procedures such as removal of a sharp thorn from under the surface of the skin, open heart surgery, neurosurgery, a range of dental treatments, nursing treatment of deep ulcers, and the broad range of other surgical practices undertaken by medical practitioners.

The risks associated with surgery are very broad, reflecting the diverse practices that might be categorised as surgery.

Discussion

Because there are considerable difficulties associated with attempting to define 'surgery' there will be difficulties in putting in place regulation which restricts surgery to those practitioners who are considered 'safe'. While most people associate 'surgery' with invasive procedures performed by specialist medical practitioners, there are many procedures performed by other practitioners that might be captured by a broad definition of 'surgery'. They include procedures undertaken by tattooists, acupuncturists, nurses, dentists, podiatrists and medical practitioners. A broad legislative definition of 'surgery' would be likely to 'capture' some of those procedures which do not, on health and safety grounds, need to be restricted to particular practitioners. For example, if surgery was defined as procedures, which penetrate the dermis, it would include treatment of deep ulcers, which is commonly undertaken by nurses. With this definition, it would be necessary to authorise nurses to undertake 'surgery'.

The alternative to a broad definition of surgery is to develop highly detailed definitions of particular surgical procedures. With this approach, relatively safe procedures would be excluded from the definition, and would not be inappropriately restricted. However, it would not be practical to develop and maintain an up-to-date and exhaustive legislative definition of all surgical procedures. These definitional problems mean that a core practices model is not an appropriate mechanism to restrict the practice of 'surgery' generally.

There is no current legislative restriction, which prevents people other than medical practitioners from undertaking 'surgery'. Instead, legislation prevents a person who is not registered as a medical practitioner from calling themselves a "surgeon" (dental surgeons are exempted from this restriction). This restriction on the use of the title, combined with the educational and training requirements for registration as a medical practitioner, means that consumers are not exposed to the risk of choosing an untrained person. In addition a number of other mechanisms, such as the Medicare system and referral to specialists by general practitioners, reinforce consumer protection.

The Review Team considers it impractical to define 'surgery'. We note that 'surgery' is not currently defined or restricted, and that there is no evidence that the absence of restriction has placed consumers at risk. On this basis the Review Team concludes that a core practices model is inappropriate for 'surgery', and that there is no justification for imposing additional restrictions.

Soft Tissue Surgery and Nail Surgery of the Foot and Other Foot and Ankle Surgery

The *Draft Policy Paper* proposed "soft tissue surgery and nail surgery of the foot" as a potential core restricted practice. However, submissions to the *Draft Policy Paper* also indicated that surgery of the muscles, tendons, ligaments and bones of the foot should also be considered for inclusion in a core practices model.

Focus group input

Two focus groups were conducted, dealing with podiatry and surgical podiatry. The surgical podiatry focus group included persons with expertise in surgery, medical practice, podiatry and surgical podiatry. The podiatry focus group included persons with expertise in podiatry and nursing.

The first issues considered were definitional parameters. Surgical podiatry focussed on certain surgical procedures of the foot and ankle and included:

- subdermal surgery of the foot and ankle, involving the bones and associated soft tissue structures; and
- surgery necessarily involving soft tissues directly associated with but above the ankle.

General podiatry practices focussed on procedures largely on, or about, the skin of the foot and included:

- nail surgery;
- debriding or excising pathological lesions of the epidermis of the foot; and
- some soft tissue surgery, which may penetrate the dermis.

The invasive nature of surgery of the muscles, tendons, ligaments and bones of the foot meant that the types of harm included not only damage to the structures of the foot but also damage to associated structures and loss of limb function or loss of limbs. Infection risks were also considered although these are controllable side effects of any surgery.

Focus group members provided considerable information regarding the many procedures that could be described as soft tissue surgery, nail surgery, or surgery of the muscles, tendons, ligaments and bones of the foot.

The focus groups discussed the competencies required to mitigate the risks associated with surgery. While the technical ability to carry out a surgical procedure was an obvious requirement, there was a significant focus on the range of skills required by a practitioner to make a diagnosis and select surgery as the most appropriate treatment. This required a broad base of anatomical, physiological, biomechanical and pathological knowledge, as well as the clinical skills that lead a practitioner to a diagnosis.

Recognising the type of practices discussed, the following professions were identified as currently engaging in soft tissue surgery and nail surgery of the foot and surgery of the muscles, tendons, ligaments and bones of the foot:

- medical practitioners (general practitioners and surgeons);
- podiatrists (including surgical podiatrists); and
- nurses.

Prima facie analysis

The Review Team agreed that surgery to the foot and ankle should be subject to consideration as the range of harm was sufficient to warrant further investigation.

As noted above, separate focus groups discussed 'podiatry' and 'surgical podiatry'. However, through the focus groups it became apparent to the Review Team that there was a need for separate consideration of soft tissue surgery and nail surgery, (which is commonly practiced by podiatrists and medical practitioners and sometimes by nurses in a hospital setting) and foot surgery which affects the muscles, tendons, ligaments and bones of the foot and ankle (undertaken by medical practitioners, medical specialists and some podiatrists with additional surgical training). While most people associate surgery with deep invasive procedures, it covers a range of activities, which need not penetrate the dermis (the lower skin layer).

As a result of these logical consequences, the Review Team elected to consider two practices:

- soft tissue surgery and nail surgery of the foot; and
- surgery of the muscles, tendons, ligaments and bones of the foot and ankle.

In respect of the filtering questions the Review Team concluded, for **soft tissue surgery and nail surgery of the foot**:

- Does the practice pose a realistic threat to vital organs (or structures) of the body? *No.*
- Is the practice invasive (e.g. surgery that penetrates the dermis)? Yes, some procedures involve penetration of the dermis.

- Is death or total disablement a realistic (measured rather than theoretical) outcome? *No.*
- Do potential harms include harm to third parties? *No.*
- Does the practice appear to be an area of poor consumer knowledge? No. According to research provided to the Review Team, consumers are aware of the practices performed by podiatrists.
- Is a legislated definition of the practice feasible? Yes.
- Is the practice subject to specific controls already (other than a restriction on practice)? *No.*
- Is the practice already undertaken by a large number of different professions (e.g.>4)? *No*.

The Review Team found that the practices of soft tissue surgery and nail surgery answered yes to two of the eight questions. On this basis it is difficult to consider soft tissue surgery and nail surgery of the foot for inclusion in the core practices model.

In respect of the filtering questions the Review Team considered, for **surgery of the muscles**, **tendons**, **ligaments and bones of the foot and ankle**:

- Does the practice pose a realistic threat to vital organs (or structures) of the body? Yes, the vascular and nervous systems are exposed in any subdermal surgery.
- Is the practice invasive (e.g. surgery that penetrates the dermis)? Yes.
- Is death or total disablement a realistic (measured rather than theoretical) outcome? Yes.
- Do potential harms include harm to third parties? *No.*
- Does the practice appear to be an area of poor consumer knowledge? Yes. According to information provided to the Review Team namely in relation to the activities of surgical podiatrists.
- Is a legislated definition of the practice feasible? Yes. If the focus of the practices is 'surgery of the muscles, tendons, ligaments and bones of the foot and ankle'.
- Is the practice subject to specific controls already (other than a restriction on practice)? *No.*
- Is the practice already undertaken by a large number of different professions (e.g.>4)? *No.*

The Review Team found that surgery of the muscles, tendons, ligaments and bones of the foot and ankle answered to seven of the eight questions. As a result further this practice was examined further in the review process.

Discussion

The Review Team examined the information available to determine whether there was evidence to indicate a significant risk of harm from surgery of the muscles, tendons, ligaments and bones of the foot and ankle. Unfortunately most of the studies examined related to differences in outcome between surgery conducted by different practitioners rather than the harm occasioned by the procedures themselves.

A 1995 study of patient reported care outcomes in the United States by Glenn¹⁵ found that the incidence of harm was small. It was claimed that procedures conducted by podiatrists were three times as likely to lead to patient reports of beneficial outcomes as those performed by orthopaedic surgeons, although the study noted that the orthopaedic surgeons were likely to have more difficult procedures referred to them.

A clinical audit of forefoot surgery was reported for Suffolk in the UK in 1996¹⁶. This audit examined the outcomes of forefoot surgery (nail and other forefoot) conducted by podiatrists, surgical podiatrists, orthopaedic surgeons and general surgeons. For nail surgery the audit showed that the rate of problem regrowth was lowest for podiatrists at 13%, rising to 50% for general surgeons. Each practitioner group attributed this to the selection of method. While this indicates failed procedures, no specific harm was identified.

Forefoot surgery included surgery on bony structures. Again, orthopaedic surgeons tended to undertake more complex surgery than podiatrists or other surgeons. Therefore only patient satisfaction could be examined because of the difficulty in comparing like procedures between the practitioner groups.

Another audit by Turbutt in 1994¹⁷ examined podiatric surgery across the United Kingdom. This found that the overall infection rate for all invasive procedures was 0.92%, with total complication rates of 2.27%. Most procedures were of the forefoot. These figures are understood to be within normal surgical parameters.

The Australian Orthopaedic Association supplied further information. Some of this information questioned the training of surgical podiatrists, comparing it with that of orthopaedic surgeons and pointing out that the training process did not appear to be as long or as comprehensive. The Australian Orthopaedic Association also challenged the transferability of US data to Australia, noting that there were some differences between the training and range of procedures carried out. The information and arguments of the Australian Orthopaedic

¹⁵ Glenn LL 1995, Patient-Reported Medical Outcomes According to Physician Type and Region, Journal of the American Podiatric Medical Association, 85(6), 328-337.

Laxton C 1996, Clinical Audit of Forefoot Surgery Performed by Registered Medical Practitioners and Podiatrists, Journal of British Podiatric Medicine, 51(4), 46-51.

¹⁷ Turbutt IF 1994, Podiatric Surgery Audit, *British Journal of Podiatric Medicine & Surgery*, 6(2), 30-31.

Association were noted and some may be useful for the assessment of benefits in the PBT, but the focus of this investigation is on evidence of risk of harm.

The data presented does not provide a conclusive argument to justify the inclusion or exclusion of surgical podiatrists from performing surgery. Surgical podiatrists currently work in Queensland and elsewhere in Australia, albeit in small numbers. Any suggestion of poor performance would need to be backed up by independent evidence.

The Review Team also noted that the presence of a small number of podiatrists who have undertaken additional training under the auspices of the Australian College of Podiatric Surgeons raises two issues relevant to a core practices model:

- surgical podiatrists who undertake more complex foot and ankle surgery are now using the title "podiatric surgeon". The term "surgeon" has normally been used to mean a person with medical qualifications who has specialised in surgery and the use of the term by podiatrists may impact on consumers' ability to identify different practitioners; and
- surgical podiatrists are trained to undertake a range of procedures to the foot, but these skills are not as extensive as the skills attained by medical practitioners, especially those medical practitioners who have qualified in one of the surgical "specialties".

Conclusion

The Review Team noted that surgery of the muscles, tendons, ligaments and bones of the foot and ankle can cause harmful effects and therefore warrants further examination. There was no evidence of significant risks of harm from soft tissue surgery and nail surgery of the foot. Consequently the Review Team did not consider there is a case for including soft tissue surgery and nail surgery in the core practices model.

Core practice	Registered professions
Surgery of the muscles, tendons,	
ligaments and bones of the foot and ankle	Podiatric surgeon/Surgical podiatrist

Psychological Testing and Therapy

The potential core practices considered in relation to psychological testing and therapy were:

- the administration and interpretation of psychological tests; and
- the administration of psychotherapy.

Focus group input

The psychological testing and therapy focus group included persons from the psychology profession. A representative of the Speech Pathologists Board of Queensland was also invited but crossed communications resulted in no-one attending the focus group from that profession.

The discussion of the definitional parameters for psychological testing focussed on both the administration and interpretation of psychological tests. Defining psychological tests was difficult as many types of test could be used to help determine and understand a person's psychology. However, in the context of a core practice model, the harm was suggested to arise from misuse of psychological tests, (being those developed according to psychological theory, validated by assessment and subject to peer review within the psychology profession). This sought to differentiate them from the 'fun' tests sometimes found in magazines or on the Internet, or other tests which might claim clinical use but have not been subject to formal validation.

Psychotherapy was considered by the focus group to be the application of interpersonal interventions aimed at personality reconstruction (or behavioural reconstruction) or improvements based on the application of theoretical formulations of mental processes for which there is a proven predictable outcome (for a group).

The range of harms was difficult to define and was unlikely to directly involve loss of life. Those identified for psychological testing related more to the use of the results of tests, either being misuse by the end user of the results (which may not be the psychologist) or the wrong results being delivered through a test being wrongly used. The harms identified were those where results are used in the following type of decisions:

- hiring or promotion decisions;
- child custody;
- legal standing;
- liability and responsibility; and
- education.

The harms identified for psychotherapy included:

- ineffective therapy; and
- incorrect or harmful psychological or behavioural reconstruction.

The focus group participants identified a range of skills required for the conduct of psychological tests and therapies, the most important of which were the ability to 'diagnose'

situations and select the appropriate tests and/or therapies. This requires a deep understanding of human psychology, as well as the ability to administer a test.

Only a small amount of information subsequent to the focus group was supplied, reflecting the limited ability to identify harm. The most significant information related to the suggestion that psychological tests were becoming widely available, either through the breakdown of traditional restrictions placed on tests by the suppliers or via Internet availability.

Formal psychological tests are supplied by organisations such as ACER (Australian Council for Educational Research), which restricts availability to those qualified to manage the tests, including the risks associated with those tests. For example, ACER supplies tests such as clinical or personality tests and some intelligence tests, to qualified/registered psychologists or their equivalent. Other tests are available more broadly, such as those designed to assist human resources or personnel managers with promotion and employment decisions.

The Review Team also examined some Internet sites supplied for reference by focus group members. This exercise confirmed by examination that there were many tests available, most of which appeared to be 'fun' tests, but some of which appeared to be more formal tests. These latter tests were generally available on a restricted basis, although it was unclear how effective this restriction could be.

A very broad range of professions were identified as being involved in activities closely related to psychological testing and to psychological and behavioural therapies, including:

- psychologists;
- speech pathologists;
- human resources managers;
- counsellors:
- coaches;
- teachers;
- psychiatrists;
- social workers;
- nurses;
- members of the clergy; and
- parents.

Prima facie analysis

The Review Team was uncertain about psychological testing and psychotherapy/behavioural therapy, as the definitions were difficult to develop and the range of persons involved was broad.

In respect of the filtering questions, the Review Team considered, for **psychological testing**:

- Does the practice pose a realistic threat to vital organs (or structures) of the body? *No*.
- Is the practice invasive (e.g. surgery that penetrates the dermis)? *No*.
- Is death or total disablement a realistic (measured rather than theoretical) outcome? *No*.
- Do potential harms include harm to third parties? *No.*
- Does the practice appear to be an area of poor consumer knowledge? Yes.
- Is a legislated definition of the practice feasible? *No*.
- Is the practice subject to specific controls already (other than a restriction on practice)? *Yes, through the limitation of access to the tests.*
- Is the practice already undertaken by a large number of different professions (e.g.>4)? *Yes*.

The Review Team found that the practice of psychological testing answered yes to only one of the eight questions.

In respect of the filtering questions, the Review Team considered, for **psychotherapy**:

- Does the practice pose a realistic threat to vital organs (or structures) of the body? *No*.
- Is the practice invasive (e.g. surgery that penetrates the dermis)? *No*.
- Is death or total disablement a realistic (measured rather than theoretical) outcome? *No.*
- Do potential harms include harm to third parties? *No*.
- Does the practice appear to be an area of poor consumer knowledge? Yes.
- Is a legislated definition of the practice feasible? *No*.
- Is the practice subject to specific controls already (other than a restriction on practice)? *No.*
- Is the practice already undertaken by a large number of different professions (e.g.>4)? Y_{es}

The Review Team found that the practices of psychotherapy answered yes to only two of the eight questions.

However, as noted earlier, the filtering questions (particularly the first two) do not adequately address the potential harm of psychological testing and psychotherapy. The Review Team therefore gave further consideration to the risk of harm from these practices. The Review Team did not identify significant instances of harm which could be directly ascribed to psychological testing or therapy – the examples considered were harm which could be ascribed to a number of causes other than testing or therapy. This, along with the difficulty in defining testing and therapy in a way that would not also capture non-health practices (e.g. personality tests in magazines and pastoral counselling in a church setting), contributed to the conclusion that neither psychological testing or psychotherapy should be further considered as potential restricted core practices.

Conclusion

The Review Team considers that given the definitional difficulties and the lack of clearly definable harm, psychological testing and psychotherapy should not be included in the core practices model.

4.3 Conclusion

As a result of the Review Team's considerations the following core practices model was proposed for the PBT assessment.

Core practice	Registered professions
Thrust manipulation of spine	Chiropractors Medical practitioners Osteopaths Physiotherapists
Prescribing optical appliances for the correction or relief of visual defects	Optometrists Medical practitioners
Surgery of the muscles, tendons, ligaments and bones of the foot and ankle	Medical practitioner Podiatric surgeon/Surgical podiatrists



Thrust Manipulation of the Spine

5.1 Practice Profile

Profession Profile

Thrust manipulation of the spine is a form of treatment that uses body leverage and a physical thrust to one joint, or a group of related joints, to restore joint and related tissue function. Through the use of thrust manipulation the practitioner seeks to provide symptom relief, improve joint and muscle functions and speed recovery.

Thrust manipulation refers to the speed and force applied during the technique. It also encompasses the theory that due to the speed of application, the patient has no control over the manoeuvre. Manipulation (as a therapeutic technique) is distinguished from other forms of manual therapy such as mobilisation and massage.

The practice is performed by:

- medical practitioners;
- chiropractors;
- osteopaths; and
- physiotherapists.

Medical Practitioners

Generally, medical practitioners, apart from general practitioners who have specialised in musculoskeletal medicine or orthopaedic surgery, refrain from using thrust manipulation of the spine as a means of treatment. Although practitioner groups such as orthopaedic surgeons perform this procedure, professional associations such as Australian Orthopaedic Association, recommend that 'manipulative' techniques be used sparingly.

Medical practitioners' infrequent use of spinal manipulation is partially reflected in the Health Insurance Commission statistics (for Medicare related services). These statistics indicate that in 1998-99 general practitioners within Queensland performed 18,644,260 attendances¹⁸. Of those attendances, approximately 2.4% or 372,885 consultations related to back complaints¹⁹. Given the comparability between methodological approaches to treatment of medical practitioners and physiotherapists²⁰, the Review Team has estimated that approximately 1% of back related consultations would have resulted in a medical practitioner applying a thrust manipulation of the spine. A medical practitioner would therefore perform less than one manipulation of the spine each year.

²⁰ Data provided by Specialist Advisors

¹⁸ Health Insurance Commission - Statistical Tables 1998-99, p. 191

¹⁹ Britt H et al (1999) Bettering the Evaluation And Care of Health: A Study of General Practice Activity p. 17.

The Medical Act 1939, is currently under review and new legislation is expected to be introduced into Parliament this year. The Act does not restrict the practice of medicine, rather, the Act prohibits anyone other than a registered medical practitioner from using the title 'doctor', 'surgeon', 'physician' and a number of other related titles. The Act prohibits non-registrants from holding out, or implying, to be a registered medical practitioner.

Medical practitioners are also regulated by amendments made to the *Health Insurance Act* 1973, which came into force in December 1996. These amendments require medical practitioners to meet minimum proficiency requirements before any service provided by the practitioner can attract a Medicare benefit.

As noted in the *Draft Policy Paper* the absence of statutory restrictions on the practice of medical practitioners can be explained by:

- strong community and professional understanding of the types of matters that require the services of a medical practitioner;
- effective controls over the employment of non-registrants in medical officer positions in hospitals and other institutions; and
- perceived effectiveness of other statutory controls over potentially harmful elements of medical practice.

In addition to the Act there are non-legislative arrangements which have an impact on the market. The professional Associations and medical colleges have codes of conduct. There are also policies on continuing professional education.

Chiropractors

Thrust manipulation of the spine represents a significant component of a chiropractic practice. Ninety-four per cent of chiropractors routinely perform (74% to 100% of practice time) adjustive (manipulative) techniques²¹. Table 5.1 provides an overview of chiropractic consultations in Australia. Based upon this data a chiropractor would on average perform approximately 260 thrust manipulations to the spine each week.

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²¹ "Job Analysis of Chiropractic in Australian and New Zealand", National Board of Chiropractic Examiners. 1994.

Table 5.1: Chiropractic Consultations in Australia 1997-98

Characteristic	Size/Number
Average weekly consultations	180,258
Total registered chiropractors	2,053
Average number of manipulations per consultation #	3
Practice Size:	
- sole practitioner	84.3%
- 2 or more	15.7%

Source: ABS 8555.0, Chiropractic and Osteopathic Services 1997-98.

The Chiropractors and Osteopaths Act 1979 restricts the practice of chiropractic and osteopathy to persons registered as a chiropractor or osteopath. However, these restrictions do not apply to medical practitioners and physiotherapists practicing within their respective fields. Chiropractors and osteopaths are restricted from performing surgery and prescribing drugs or medicines for internal use. Registrants under the Act can hold themselves out as either profession (chiropractor or osteopath) in the market.

The definition of practice has in some instances led to a restriction in the normal practice activities of massage therapists. As indicated in a letter from Flehr and Walker Solicitors to the Queensland Association of Massage Therapists:

If the words 'manipulation, mobilisation and management of the neuromusculoskeletal system of the human body' are taken literally then any person who carries out massage therapy would be breaking the law.

Such issues are associated primarily with the interpretation of manipulation in relation to its definition under the current *Chiropractors and Osteopaths Act 1979* rather than manipulation per se. The Queensland Association of Massage Therapists has indicated that a broad interpretation of the Act would suggest that the traditional practices of massage therapists are in breach of the regulations.

Osteopaths

Osteopathy, according to Ward²², is a philosophy that embraces the concept of unity in the body structure and function in health and disease. It emphasises the recognition and treatment of somatic dysfunction, which may have impaired or altered the function of related components of the body. Thrust manipulation of the spine is applied in cases where the

[#] Data provided by Professor R Bonelb, Macquarie University.

²² Ward RC ed. (1997) Foundations for Osteopathic Medicine, Williams and Wilkins.

patient has symptoms of pain, within a joint or joints, or to minimise abnormal tension within the joint. The speed of the thrust applied to the area is dependent upon the pathological conditions of the patient and the acuteness of pain being felt.

Table 5.2 provides an overview of osteopathic consultations in Australia. On average, an osteopath performs 43 consultations per week. According to the Australian Osteopathic Association, an average of three thrust manipulations to the spine would occur per consultation.

Table 5.2: Osteopathic Consultations in Australia 1997-98

Characteristic	Size/Number
Average weekly consultations	17,011
Total registered osteopaths	395
Average number of manipulations per consultation	3
Practice Size:	
- sole practitioner	84.3%
- 2 or more	15.7%

Source: ABS 8555.0 Chiropractic and Osteopathic Services 1997-98.

Osteopaths are regulated by the *Chiropractors and Osteopaths Act 1979*. The Act restricts practice through a statutory definition of practice and provides title protection. Currently only 20% of registrants are members of the Australian Osteopathic Association. The Association requires its members, as part of membership, to undertake continuing professional development.

One issue that the Australian Osteopathic Association has raised is the dual registration currently provided for under the Act. According to the Association there have been a number of recent cases where consumers have falsely believed that a practitioner was qualified to practice osteopathy.

Physiotherapists

The practice of physiotherapy is restricted by the *Physiotherapists Act 1964*, where physiotherapy is defined as:

the use of those methods of treatment for curing, alleviating or preventing abnormal conditions of the human body duly recognised by the board as approved methods of treatment, and includes the assessment, based on specialised knowledge, of abnormalities of movement or posture and other signs associated with physical disability, for the purpose of determining the appropriate method of treatment.

The practice of physiotherapy is restricted to physiotherapists, but such restrictions do not limit the practice of podiatry, massage of the face or scalp for cosmetic purposes, or the application of massage to a person engaged in physical culture or sport. Title protection is currently provided under the Act.

Thrust manipulation to the spine, as a therapeutic technique, does not represent a large proportion of a physiotherapist's practice. Thrust manipulation is generally only applied if, after assessment, it is considered that:

- joint function requires restoration; and
- that manipulation is the treatment of choice over and above other articular (joint) technique options.

Physiotherapists believe that, with respect to neuromusculoskeletal disorders, joints are unlikely to be the only dysfunctional system contributing to the patient's condition. The assessment will determine the proportion of involvement relating to the other two systems – the muscle system and the neural system. All three systems may be addressed in the one treatment session depending on diagnosis.

On average a physiotherapist performs 56 consultations per week, of which one per cent would result in a thrust manipulation to the spine²³. A physiotherapist would therefore, on average, perform one thrust manipulation of the spine per fortnight. However, it has been indicated to the Review Team that some private sector physiotherapists with additional training use manipulation as extensively as chiropractors.

Section 24A of the Act provides for the Physiotherapists Board of Queensland to recognise specific practices as approved methods of treatment. Therefore, there may be situations where registered practitioners (other than physiotherapists) or unregistered practitioners could be in breach of the Act because their methods of practice may fall within the parameters of physiotherapy. The legal position is unclear with regard to the breadth of the definition of physiotherapy. Consequently, the range of practices that are restricted to physiotherapists is uncertain. The Review Team understands that the Board has not exercised this power to date. The current legislative restrictions, however, do provide the Board with the ability to restrict, potentially in an anti-competitive manner, specific procedures that the Board deems to be the practice of physiotherapists.

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²³ Data provided by specialist advisors, based upon preliminary findings of an industry report.



Table 5.3: Physiotherapist Consultations in Australia 1997-98

Characteristic	Size/Number
Average weekly consultations	289,038
Total registered physiotherapists	5,187
Average number of manipulations	1% of consultations
Practice Size:	
- sole practitioner	68.2%
- 2 to 5 practitioners	29%
- 6 or more practitioners	2.8%

Source: ABS 8552.0 Physiotherapy Services 1997-98.

Risk of Harm

The Review Team was presented with a large range of evidence that indicated the practice of manipulation of the spine posed significant levels of harm. However, it was considered that the risk of that harm occurring was relatively low. It was also identified that manipulations to the spine involving the applications of thrust movements possess the most risk. The information available did not show a reliable difference in risk between the registered professions currently involved in spinal manipulation. However, the potential of harm led the Review Team to conclude that the practice of thrust manipulation of the spine should be considered for inclusion in a refined core practices model.

Table 5.4 provides a summary of the available quantitative evidence of the risks associated with thrust manipulation of the spine.



Table 5.4: Risks Associated with Spinal Manipulation

Study	Complications	Risk Estimate
Assendelft, Bouter, Knipschild (1996)	Vertebrobasilar accident	From 1/20,000pts to 1/1 million cervical manipulations
	Cauda Equina Syndrome	1/1 million treatments
Dvorak, Orelli (1985)	Major complications	1/400,000 manipulations
	'Slight' neurological complications	1/40,000 cases
Haynes (1994)	'Stroke'	<5/100,000 patients receiving neck manipulation
Gutman (1983)	Vertebrobasilar accident	2-3/1 million cervical manipulations
Henderson, Cassidy (1988)	Vertebrobasilar accident	1/1 million manipulations
Shekelle et al (1992)	Cauda Equina Syndrome	1/100 million manipulations

5.2 Base Case Analysis

The conduct of a PBT analysis requires that the advantages and disadvantages associated with the current legislative arrangements be identified. These advantages and disadvantages have been examined for the following key stakeholder groups:

- consumers;
- market incumbents;
- other practitioner groups who do not currently practice thrust manipulation of the spine;
 and
- regulatory and government bodies.

Consumers

The current legislative arrangements have, as one objective, protection of the consumer. One measure of the success in achieving that objective is the number of complaints lodged with the respective professional Boards. The published evidence available suggests that complaints are low in number:

- During the 1998-99 financial year the Medical Board of Queensland reviewed 111 complaints. "Of the complaints received 60% related to standard of care issues and 12% related to a doctor's professional standards. Complaints of sexual misconduct comprised 9.3% and complaints concerning communication comprised 8.7% of complaints"²⁴. During the 1998-99 reporting period the Medical Assessment Tribunal dealt with 13 cases, one of which related to a general practitioner manipulating a patient's spine. This case did not relate to competency but was in relation to professional conduct. Over the past five years this has been the only case brought before the Tribunal relating to manipulation of the spine.
- Thirteen complaints received by the Chiropractors and Osteopaths Board of Queensland during 1998-99, of which 3 related to the practice of unregistered persons, 4 relating to unsatisfactory treatment and 6 associated with unprofessional conduct. Of these cases, only one related to an unregistered person practicing.
- During 1998-99 the Physiotherapists Board of Queensland investigated 8 complaints, 3 of which were initially investigated during the previous financial year. These cases related to a professional practice issue, advertising by a non-physiotherapist, and inappropriate behavior. Of the 5 complaints received during 1998-99, 3 related to advertising by non-physiotherapists and 2 complaints concerning treatment and unprofessional behaviour.

Whilst the restrictions to practice encompassed in the current arrangements protect the consumer, this possibly comes at a cost in terms of the level of price competition and consumer access to and choice of service.

Submissions to the Review indicate that price competition is generally confined to intraprofessional arrangements. However, the level of charges for services provided by the different practitioner groups is wide ranging:

- the average cost for a standard 15 minute consultation provided by a chiropractor, which may involve spinal adjustment, is approximately \$35.00²⁵;
- the cost of an osteopathic consultation to treat a pre-diagnosed condition is \$60.00 for a 20 minute consultation²⁶; and
- the average fee for a 30 minute consultation by a physiotherapist is between \$35.00 to \$40.00²⁷. In some situations a consultation may cost \$50.00 due to a longer consultation time or the practitioner's qualifications.

In terms of access to practitioners, there is some variability between each profession according to geographical location:

²⁴ The Medical Board of Queensland, Annual Report 1998-99, p 20.

²⁵ Recommended Fee Schedule, Effective 1st October 1999, Chiropractors Association of Australia (Qld)

²⁶ Suggested Schedule of Fees, Australian Osteopathic Association 1/4/99

- As at 30 June 1999, there were 7,603 medical practitioners and 3,582 medical specialists registered in Queensland, of which 3,193 medical practitioners and 1,827 medical specialists were located within Brisbane. The remaining practitioners were located outside either Brisbane or Queensland.
- Chiropractors and osteopaths are primarily located outside Brisbane. As at 30 June 1999, there were 533 registered chiropractors and osteopaths in Queensland²⁸, of which 59 practitioners were located outside Queensland, 123 practitioners were located within Brisbane with the remainder of practitioners located in rural and regional Queensland. Based upon data provided by the Chiropractors' Association of Australia (Queensland) there are currently 488 registered chiropractors in Queensland, with 14 of these registrants domiciled outside Queensland.
- As at 30 June 1999 there were 2,500 physiotherapists registered in Queensland. Eight per cent of physiotherapists were located outside Queensland. Of the remaining 92%, 55% of physiotherapists had addresses within Brisbane the metropolitan area. The remaining 45% of physiotherapists were located in regional Queensland.

Incumbent Practitioners - Chiropractors, Osteopaths, Physiotherapists, Medical Practitioners

Whilst the objective of consumer protection has been achieved by the current legislative arrangements, an issue is the appropriateness of the scope of the statutory definitions of practice which exist in the *Chiropractors and Osteopaths Act 1979* and the *Physiotherapists Act 1964*.

The definitions of practice limit the activities of registered practitioners (other than chiropractors, osteopaths, physiotherapists) and non-registered practitioners in the practice of physiotherapy, osteopathy and chiropractic and therefore restrict competition from alternative service providers. Such restrictions are of benefit to physiotherapists, chiropractors and osteopaths. This benefit could manifest itself through the maintenance of higher prices reflecting higher profits than what would be the case if there was greater competition.

The magnitude of impact of such restrictions on competition is difficult to judge. For example, the legal position on the breadth of the definition of physiotherapy is unclear. Currently, massage therapists are offering some services that would fall within the definition of physiotherapy. If the provisions of the *Physiotherapists Act 1964* were fully enforced massage therapists would be restricted in their scope of practice.

Other Practitioners

The counterpart of the benefit, which is provided to chiropractors, osteopaths and physiotherapists through legislative restrictions, is the cost imposed on other practitioners.

²⁸ Chiropractors and Osteopaths Board of Queensland, 1998-99 Annual Report

Because the definitions of practice applicable to physiotherapists, chiropractors and osteopaths are broad in structure, the potential scope of the professional activities of alternative providers (registered or non-registered) is restricted. These restrictions reduce the potential for employment opportunities and delivery efficiencies (achieved through the use of alternative providers).

Regulatory and Other Government Bodies

The costs of oversight of the current legislative framework are borne by:

- the relevant Queensland Boards; and
- the Queensland Government, primarily through Queensland Health and the Health Rights Commission.

Many of the costs incurred by these bodies are in relation to a wide range of matters beyond those related to the practice of thrust manipulation of the spine and include costs associated with registration, investigation of complaints and enforcement of the Act. To that extent, changes in relation to the restrictions on a single practice may have little impact on such costs.

The size of potential benefits from removing regulatory restrictions will also depend, in part, on the current level of enforcement. For example, in the case of Section 24 A of the *Physiotherapists Act 1964*, a number of practitioners could be in breach of the Act depending on the Physiotherapists Board of Queensland decisions on approved methods of treatment. The current regulatory arrangements, if fully enforced, could pose a significant cost on the Board and government agencies.

5.3 Core Practices Model

The core practices model will restrict the practice of thrust manipulation of the spine. It will provide a practice definition and will restrict the practice to medical practitioners, osteopaths, chiropractors and physiotherapists. Title protection will be provided for medical practitioners, chiropractors, osteopaths and physiotherapists.

The core practices model represents a reduction in the current levels of legislative regulation. Practices, apart from thrust manipulation of the spine, will have statutory practice definitions removed. This would enable greater efficiency in service delivery. For example, removal of unnecessary restrictions would enable massage therapists to perform mobilisation to the neuromusculoskeletal system or nurses to perform electrotherapy provided they do not use a restricted title.

The inclusion of a core practice definition in the various Acts is designed to minimise the risk associated with thrust manipulation of the spine. The removal of other statutory practice definitions will permit alternative service provision for practices other than thrust manipulation of the spine.

Consumers

Four potential consumer benefits have been assessed in this analysis:

- consumer protection;
- price benefits flowing from increased competition in practice areas where practice restrictions have been removed, for example mobilisation and management of the neuromusculoskeletal system, manipulation (other than thrust manipulation of the spine), mobilisation and assessment of abnormalities of movement or posture;
- consumer choice for practices other than thrust manipulation of the spine; and
- consumer information.

Consumer protection

The core practices model protects consumers from the risk associated with the practice of thrust manipulation of the spine. The core practices model removes restrictions on low risk practices and retains restrictions on who may practice spinal manipulation. Registration requirements and title restriction are the same as the base case. Non-legislative consumer protection arrangements implemented by the professional Associations will also continue under the core practices model.

For practices other than thrust manipulation of the spine, the analysis performed by the Review Team indicates that the risk of harm is minimal and therefore a similar level of restriction to thrust manipulation of the spine should not be required.

It is concluded that current levels of consumer protection would continue under the core practices model.

Price benefits

An increase in competition is theoretically achievable with the implementation of a core practices model for thrust manipulation of the spine. The removal of restrictions associated with the implementation of the core practices model will enable some practitioners to increase their current scope of practice. This should be possible for practices performed by physiotherapists, chiropractors and osteopaths other than the practice of thrust manipulation of the spine.

Where there is an increase in the scope of practice an increased level of competition within the existing market is possible. The resulting competitive pressure, from an increased number of competitors, could result in more competitive pricing arrangements achieved by examining measures to improve efficiency or adopting more efficient resourcing arrangements within the workforce.

However, price changes alone do not represent benefits, rather they represent distributional effects. Net benefits are produced where competition induces reductions in profit margins consistent with normal commercial returns or improvements in cost effectiveness. Insufficient information was available to perform detailed analysis of profitability or cost structure. However, some general observations can be made.

- 1. Increased competition in the market may encourage practitioners to examine the potential for capturing cost efficiency. The key issue is the nature and size of those savings. Many of the businesses are sole practitioners and most costs are labour related in which case, cost reductions may not increase the incidence of risk of harm. However, the scope for further price competition is unclear. Intra-professional competition exists and the level of further price competitiveness is difficult to quantitatively measured. Any future price movement could be small.
- 2. The magnitude of any potential price change will vary from market to market. There will be some markets, most notably in regional areas, where there may not be the depth of supply, to ensure price competition. Nonetheless even competition on the margin will promote consumer benefit.
- 3. A marginal issue is that of compliance costs. Where restrictions are removed requirements for compliance are reduced. This may produce cost savings for practitioners.

The extent to which competition emerges will depend, in part, on how effective the existing restrictions are enforced. There are many cases where alternative service provision, compared to services provided by physiotherapists, chiropractors and osteopaths exist. In such cases the pro-competitive effect of implementing the core practices model will be limited.

Competition benefits are unlikely to emerge in the case of the practice of thrust manipulation of the spine. The practice will continue to be restricted under the core practices model.

On balance, it is been concluded that the benefits of price competition from implementing the core practices model will be minor.

Consumer choice

The impact of implementation of the core practices model on consumer choice is not clear cut. A range of different impacts needs to be taken into account such as the potentially wider choice for some services but also the potentially different regional impacts.

In the case of the restricted practice of thrust manipulation of the spine, no change in consumer choice is expected from the base case, as the practice restriction is unchanged. However, restrictions on other practices will be removed. Alternative service provision will be possible which could produce benefits where currently there is only a single provider. Based on data that is publicly available the extent of that benefit cannot be measured accurately. For example, there are currently significant numbers of service providers outside the Brisbane metropolitan area.

Reflecting these considerations it is concluded that the potential benefits of increased consumer choice would be minor.

Consumer information

Consumers have a general awareness of the services provided by medical practitioners, physiotherapists, chiropractors and osteopaths. This awareness has been developed through information and Workcover campaigns regarding the importance of the spine. Additionally, consumers have established purchasing patterns for practitioners that perform thrust manipulation of the spine.

With the implementation of a core practice model, there is the potential for improved consumer information. Because the current practices of physiotherapists, chiropractors and osteopaths will be open to alternative providers under the core practices model, there is the potential for the current practitioner groups to decide to undertake initiatives to distinguish their services within the market to promote the professions' scope of practice. Increased consumer knowledge could occur in relation to the practices, which are no longer protected by practice definition.

It is concluded that consumer information could be expected to improve but that this impact would be minor.

Incumbent Market Practitioners - Chiropractors, Osteopaths, Physiotherapists, Medical Practitioners

The core practices model could theoretically lead to increased competition for chiropractors, osteopaths, physiotherapists and medical practitioners. This is because services, other than 'thrust manipulation of the spine', will be able to be performed by alternative providers. For example, under the current legislative arrangements physiotherapists are the only practitioner group permitted to perform electrotherapy. This restriction will not exist under a core practices model.

The impact of increased competition on market incumbents is difficult to assess and will ultimately depend on changes in consumer demand patterns. On balance, such impacts could be minor and may take some time to occur.

There may be an impact on the cost of providing services. A reduction in legislative restriction may reduce compliance costs. However, various forms of marketing in a more competitive market will impose additional costs on market incumbents. An example might be increased advertising costs to promote the fact that the practitioner is registered. Overall, impacts on costs are likely to be minor.

Other Practitioners

The impact on new market entrants will reflect the impact on market incumbents.

Implementation of the core practices model will permit a range of other practitioners to increase their current scope of practice. For example, practitioner groups such as massage therapists will be able to perform their traditional practices without the potential for litigation under the *Chiropractors and Osteopaths Act 1979*. Thrust manipulation of the spine would be the only restricted practice.

An increased scope of practice could improve the viability of what are essentially small businesses.

However, as has already been concluded, the extent to which sustainable, significant competition can be generated will be limited. The benefits of increased scope of practice are therefore likely to be minor.

Regulatory and Other Government Bodies

Under a core practices arrangement it is anticipated that there will be some reduction in enforcement costs incurred by regulatory authorities and other government bodies. This is due to reduced levels of legislative protection applied under the core practices model compared to current arrangements.

However, the core practices model is underpinned by the same registration requirements and protection of title as the base case. It is assumed that the respective Boards' work load will not change significantly.

Overall, it is concluded that the potential benefits of reduction in regulatory costs would be minor.

Summary

Implementation of a core practices model for the practice of thrust manipulation of the spine will:

- provide a definition of the practice of thrust manipulation of the spine; and
- restrict the performance of the practice to medical practitioners, osteopaths, chiropractors and physiotherapists.

Title protection will continue for these practitioner groups.

The Review Team considered that implementation of the core practices model would benefit consumers through:

- maintenance of consumer protection;
- price benefits flowing from increased competition in practice areas where practice restrictions would have been removed, for example mobilisation and management of the neuromusculoskeletal system, manipulation (other than thrust manipulation of the spine), mobilisation and assessment of abnormalities of movement or posture;
- improved consumer choice; and
- improved consumer information.

The practice of thrust manipulation of the spine will continue to be restricted under the core practices model. Non-legislative consumer protection arrangements supported by the relevant professional Association will also continue. Therefore, current levels of consumer protection should be maintained.

For practices other than thrust manipulation of the spine, the Review Team concluded that the risk of harm is minimal and therefore a high level of restriction should not be required. The implementation of the core practices model would remove restrictions on practices other than thrust manipulation of the spine. This would allow some practitioners to increase their current scope of practice. As noted in discussion of the base case (p.48) the increased scope of practice will include the normal practice activities of massage therapists and other practitioners, which are restricted under the current legislation. While there is potential for an increase in competition, it will be minor because the current restriction is not fully enforced. The Review Team was of the view that competition would encourage practitioners to examine the potential for capturing efficiency. Alternative service provision, where restrictions have been removed, will improve consumer choice.

There is the potential for improved consumer information where practice restrictions have been removed under the core practices model. The current practices of physiotherapists, chiropractors and osteopaths, other than thrust manipulation of the spine, will be open to alternative providers. There will therefore be an incentive for greater marketing to improve consumer knowledge of different services within the market in order to promote each profession's practice.

Implementation of the core practices model will lead to increased competition for chiropractors, osteopaths, physiotherapists and medical practitioners. This is because services, other than 'thrust manipulation of the spine', will be able to be performed by alternative providers. However, the Review Team is of the view that the impact on market incumbents is difficult to assess and will ultimately depend on changes in consumer demand patterns. Significant changes could lead to employment impacts but these are likely to be redistributive in nature. Whilst there may be some employment impact on market incumbents,

implementation of the core practices model will permit a range of other practitioners to increase their current scope of practice and this may have positive employment impacts. Such changes could lead to positive impacts for businesses outside of the core practice definition.

The Review Team concluded that implementation of a core practices model will reduce costs incurred of regulatory authorities and other government bodies due to reduced levels of legislative practice restriction but that such reductions would be minor.

5.4 Title Only Model

The title only option moves further along the de-regulation continuum by removing restrictions relating to thrust manipulation of the spine in addition to the other practice restrictions removed under the core practices model. Title protection would be provided within the Acts.

As noted previously, the Review Team considered that the public is generally aware of the importance of the spine. The title only model was included for further assessment in the NCP process on the basis that it needs to be tested whether such knowledge is sufficient to protect the consumer and whether standards could diminish if practice restrictions were removed.

In terms of the PBT assessment, many of the benefits of the title only model are similar to those of the core practices model, particularly those relating to possible increases in scope of practice. The additional costs and benefits of the title only model relate to the removal of restrictions on the practice thrust manipulation of the spine.

Consumers

It is possible that the competition benefits of implementing the title only model will be greater than the core practices model given that all practice restrictions will be removed. As in the case of the core practices model, there will be increased competition in practice areas outside of thrust manipulation of the spine, where practice restrictions have been removed, and also in the case of thrust manipulation of the spine where the practice definition has been removed and only title protection exists.

There are risks of harm associated with the practice of spinal manipulation. The probability of these risks occurring is relatively low. However, that assessment related to the practices of currently registered practitioners. Given that under the title only model there is the possibility of alternative service provision there is a probability that the incidence of risk will increase. This increase will be attributable to the increased likelihood that unqualified persons, either persons not currently registered and/or permitted to practice under the base case, will enter the market. A title only model places more emphasis upon consumers being aware of the expertise and skills of persons practicing within the market. Consumers are aware of the forms of treatment provided by traditional practitioner groups although this level of understanding does not necessarily extend to alternative health practices, for example

massage therapists. Under a title only model there is the potential for consumers to incur higher risks through seeking treatment from unsafe practitioners within the market. While serious consumer harm occurs infrequently, the evidence summarised above (page 52) indicates that the consequences can be serious.

It is concluded that there may be additional benefits of competition from implementing the title only over the core practices model, but that such benefits would be minor and may be accompanied by greater risk of harm. There is therefore an issue as to whether the title only model satisfies the objective of consumer protection.

Market Incumbents - Chiropractors, Osteopaths, Physiotherapists, and Medical Practitioners

Implementation of the title only model does not benefit the market incumbents. With the exception of medical practitioners, where only title protection currently exists, the current statutory definitions of practice will be removed. The title only model therefore extends the potential for competition into the restricted practice of the thrust manipulation of the spine.

The title only model therefore has the potential to reduce current levels of profitability for physiotherapists, chiropractors and osteopaths further than the core practices model because it will possibly introduce competition into the practice of thrust manipulation of the spine. Competition in the provision of spinal manipulation services has the potential to affect business and employment for chiropractors, osteopaths and physiotherapists. If there were a significant shift in consumer consumption patterns away from current practitioners, there would be the potential to redistribute employment between those practitioners and other practitioner groups. However, any impact on business and employment would be minor. Consumers appear to be aware that particular skills are needed to perform thrust manipulation of the spine, and consumption patterns are unlikely to change significantly.

Overall, it is concluded that the impact on market incumbents from implementing the title only model, whilst greater than the core practices model, will be minor.

New Market Entrants - Other Practitioners

As with the core practices model, the title only model provides alternative practitioners with an increased scope of practice through the removal of current practice restrictions. The key difference between the title only model and the core practices model is that the additional benefits of extended practice scope will extend to the practice of thrust manipulation of the spine.

However, whilst the title only model offers greater opportunity for new entrants to the market than the core practices model, like the core practices model the additional benefits are likely to be minor.

Regulatory and Other Government Bodies

The title only model has the potential to further reduce current enforcement costs for regulatory authorities and other government bodies from the core practices model because of the removal of all practice restrictions and the retention of only title protection.

However, the workload of the Health Rights Commission, may increase if consumer complaints increase in line with expanded alternative service provision extending to thrust manipulation of the spine.

On balance, it is concluded that implementation of the title only model would not produce any change from the base case.

Summary

Under a title only model restrictions on practice, including the practice of thrust manipulation of the spine, will be removed from legislation. Only registered practitioners – chiropractors, osteopaths, physiotherapists and medical practitioners - will be permitted to use specified professional titles.

There are risks of harm associated with the practice of thrust manipulation of the spine. While the probability of harm occurring is relatively low, the potential for unqualified practitioners to undertake spinal manipulation means the incidence of consumer harm could increase under a title only model.

Removal of all restrictions on practice means the benefits of competition are potentially greater under a title only model than the core practices model. Alternative practitioners will have an increased scope of practice, which may have a positive business effect for new market entrants. However, like the core practices model, the additional benefits will be minor.

With increased competition, the title only model has the potential to reduce current levels of profitability for physiotherapists, chiropractors and osteopaths further than the core practices model because it will possibly introduce competition into the practice of thrust manipulation of the spine. However, this will be of benefit to other practitioners who enjoy an increased scope of practice.

There is potential for reduced enforcement costs as a result of removal of practice restrictions. This would be balanced by the potential for increased complaints to the Health Rights Commission if unskilled practitioners perform thrust manipulation of the spine. On balance, the effect on regulatory bodies would be neutral.

5.5 Conclusions

The Review Team found from its analysis of the current legislative arrangements that consumer protection has been achieved but there are potential costs associated with achieving that objective.

There is a risk of harm associated with thrust manipulation of the spine. There are consumer protection benefits from defining spinal manipulation as a core practice and quarantining it from exposure to competition. Competition in the practice of thrust manipulation of the spine under a title only model, through the entry of new participants within the industry, increases the probability of consumer harm. This increase is attributable to the increased likelihood that unqualified persons will enter the market.

The core practices model does not provide any direct benefits for incumbent professions. Where competition increases from alternative providers a minor redistributive effect will occur impacting on profits or employment opportunities of market incumbents. The beneficiaries are consumers and alternative service providers.

Under a title only model the competition benefits are heightened. The restrictions on thrust manipulation of the spine, which would be present in the core practices model, would be removed as part of the implementation of the title only model. However, there is the potential for consumers to incur higher rates of harm through seeking treatment from unsafe practitioners within the market. There is therefore an issue as to whether such competition, and consequent benefits, is sustainable in the long term.

As with the core practices model, the title only model will not benefit the incumbent practitioners. A title only model has the potential to reduce current levels of profitability for physiotherapists, chiropractors and osteopaths.

As with the core practices model, the title only model provides alternative practitioners with an increased scope for practice through the removal of practice restrictions prescribed under the base case. This change has the potential to increase current employment levels for alternative practitioner groups.

Under a core practices model it is anticipated that there will be a reduction in enforcement costs incurred by regulatory authorities and other government departments. The title only model has similar impacts.

Taking into account these considerations it has been concluded that there are grounds, in terms of public benefit, to implement the core practices model for thrust manipulation of the spine. Implementation of the core practices model maintains current levels of consumer protection and promotes competition in the delivery of practices other than thrust manipulation of the spine. The additional competition benefits of the title only model are unlikely to be sustainable and are accompanied by an increased risk of harm. The Review Team has concluded that the core practices model best serves the objective of protection of the public.

Impact Matrix – Thrust Manipulation of the Spine

	BASE C	CASE	CORE PR	ACTICES	TITLE	ONLY
	Advantages	Disadvantages	Benefits	Costs	Benefits	Cost
Consumers	Consumer protection through restrictions on practice and on the use of professional titles	Price competition primarily confined to intraprofession competition Possible restrictions on consumer choice and access	Consumer protection is comparable to the base case through restriction of high risk practice, with no additional consumer cost (neutral) Increased price competition due to increased services provided by alternative practitioners (minor impact) Improved consumer information through competition between alternative service providers (minor impact) Increased consumer choice and access for non restricted practices (minor impact)	• NIL	 Increased price competition due to increased services provided by alternative practitioners (minor impact) Improved consumer information through competition between alternative service providers (minor impact) Increased consumer choice and access to services (minor impact) 	Consumer protection reduced; potential for increased risk of harm due to new (untrained) entrants in the market (major harm, though low probability)
Chiropractors, Osteopaths, Physiotherapists, Medical Practitioners	Legislative arrangements insulate practitioners from competition	• NIL	• NIL	Increased competition for non-restricted practices (minor impact)	• NIL	Increased competition (minor impact)



Impact Matrix – Thrust Manipulation of the Spine

	BASE CASE		CORE PRACTICES		TITLE	ONLY
	Advantages	Disadvantages	Benefits	Costs	Benefits	Cost
Other Practitioners	• NIL	 Restricts the range of services provided by alternative practitioners Restrictions on business opportunities 	Increased scope of practice and business opportunities (minor impact)	• NIL	Increased scope of practice and business opportunities (minor impact)	• NIL
Regulatory and government bodies	• NIL	Costs of enforcement of the Acts	Reduced enforcement costs (minor impact)	• NIL	• NIL	• NIL



Prescribing Optical Appliances for the Correct or Relief of Visual Defects



6.1 Practice Profile

Professional Profile

The practice of prescribing of optical appliances is performed by:

- medical practitioners; and
- optometrists.

Medical Practitioners (General Practitioners/Ophthalmologists)

General practitioners perform preliminary testing for visual conditions. These tests enable the practitioner to conduct a preliminary assessment of the patient's condition and ascertain the need for further investigation. Dependent upon the diagnosis, the practitioner may refer the patient to either an optometrist or ophthalmologist. In situations where a general evaluation is required the general practitioner would refer the patient to an optometrist whilst for more complex conditions a referral would be made to an ophthalmologist. It is a rare occurrence for a general practitioner to prescribe an optical appliance.

Ophthalmologists provide consumers with services ranging from treatment for cataracts, glaucoma, retinal problems, eyelid problems, corneal diseases to general eye testing and surgery. However, according to the Royal Australian College of Ophthalmologists, ophthalmic testing does not represent a significant component of an ophthalmologist's practice. In some situations, ophthalmologists utilise the services of orthoptists and optometrists to conduct eye testing.

As indicated previously in dealing with the practice of thrust manipulation of the spine, medical practitioners are regulated by the *Medical Act 1939*, which prohibits anyone other than a registered medical practitioner from using the title of 'doctor', 'surgeon', 'physician' and a number of related titles.

Optometrists

Optometrists perform examinations of the eye to investigate visual function and the health of the eyes and related regions. These investigations involve a number of routine tests in conjunction with tests dependent in application upon the patient's symptomatology, observations and the practitioner's initial findings.

An optometry practice may comprise consultation and dispensing activities. As discussed later, the significance of each activity is related to the business structure of the practice. For example, it appears that optometrists are withdrawing from dispensing activities and in some cases being

employed solely to conduct testing. There are approximately 300 optometrists in Queensland who work under the latter circumstances²⁹.

The *Optometrists Act 1974* restricts the practice of optometry to optometrists and medical practitioners. The practice of optometry is defined as;

that branch of science concerned with the investigation of the functions of vision and with the prescribing, fitting or servicing of optical appliances for the correction or relief of visual defects due to anatomical or physiological variations without recourse to medicine or surgery.

The Act restricts optometrists from undertaking surgery for any purpose associated with the practice of optometry. Protection is provided for the titles of, optometrist, optician or any other title prescribed by the Optometrists Board of Queensland to designate optometrists or the practice of optometry. Additional protection is provided through the allocation of Medicare provider numbers to optometrists to provide optometry consultations.

Risk of Harm

The Review Team's consideration of the practice of prescription of optical appliances focussed on two issues:

- the harm associated with misdiagnosis; and
- the risk of third party harm.

One of the tests applied by the practitioner to determine whether the patient requires glasses is refraction. Refraction enables the practitioner to classify patients as having either normal levels of vision with spectacles or abnormal levels of vision with spectacle correction. Normality is measured in relation to 6/6 or 20/20 vision. "However without considering the results of an eye health evaluation along with patient history and other functional tests, there is no way of determining that the final refraction and acuity is normal for the individual patient or limited by a disease state." According to the Optometrists Association of Australia, inaccurate or inappropriate prescription of spectacles can alter or retard the development of the visual system, this is particularly the case for children. In an extreme case of misdiagnosis, a person who is legally blind because of a retinal disorder, such as age related maculopathy, can have spectacles prescribed accurately by an automatic refracting machine without any recognition of the fact that the person is blind, hence harm is caused through misdiagnosis which impacts both the consumer and third parties.

³⁰ Submission of the Optometrists Association of Australia - March 2000, p. 2

²⁹ Submission of Optometrists Association of Australia - March 2000



To place the magnitude of the potential risk into context, a survey³¹ undertaken of 1,094 patients without significant refractive error and no symptoms of eye disease or systemic diseases with ocular manifestations, indicated that 2.73 per cent of patients had fundus abnormalities with significant potential for vision loss and requiring possible intervention or additional follow up.

According to Southgate, based upon average annual referral figures (optometrists to medical practitioners) one in fifteen patients who presented for an eye examination were referred for eye disease or manifestations of systemic disease³². This proportion equates to 160,000 cases per annum. The distribution of such conditions was the focus of the study, resulting in an estimate that in 1988 Australian optometrists referred 15,000 patients annually for treatment of cataract, a similar number for the treatment of glaucoma, and 30,000 for the treatment of vascular diseases and diabetes. He calculated that 11,000 people who were not known to suffer from diabetes would be diagnosed by Australian optometrists to have ocular signs of diabetes.

6.2 Base Case Analysis

The following analysis addresses the advantages and disadvantages associated with the current legislative arrangements. These advantages and disadvantages are examined for the key stakeholder groups – consumers, market incumbents, other practitioners and regulatory and other government bodies.

Consumers

The *Optometrists Act 1974* restricts the practice of optometry to optometrists and medical practitioners. These arrangements are supported by non-legislative arrangements put in place by the professional Associations as a prerequisite of membership. Ninety-three per cent of practicing optometrists are members of the Optometrists Association of Australia. Members are required to abide by the Association's code of ethics. All members are required to undertake continuing professional education.

One measure of the success of consumer protection is the number of complaints lodged with the respective professional Boards. The published evidence available suggests that complaints are low in number:

- There have been no cases heard by the Medical Assessment Tribunal over the past five years, which related to either a general practitioner or ophthalmologist conducting eye examinations.
- During 1998-99 the Optometrists Board of Queensland received a total of 12 complaints³³. Seven complaints related to breaches of advertising provisions, three related to allegations

³¹ Pollack AL, Brodie SE. 1998. Diagnostic Yield of Routine Dilated Fundus Explanation. Ophthalmology. 105: 382-386.

³² Southgate DC Optometric Referrals, Diabetic Patients and Prescribing Patterns. Results of a Survey Conducted in the Period August-September. Clin Exp Optom 1988; 72: 194-99

³³ Optometrists Board of Queensland, Annual Report 1998-99



of unprofessional conduct, one to health services and one related to a person alleged to be practicing as an optometrist. In relation to the latter case the person in question was reprimanded by the Board and provided the Board with an undertaking that he would not practice optometry.

Price competition in prescription services is limited. There are no recommended fees for optometric services because most optometrists bulk-bill Medicare schedule fee rates effectively cap the level of consultation fees. The current Medicare schedule fee for an initial optometry consultation is \$54.20 and the rebate to the consumer is \$46.10. The cost to the consumer is therefore between zero, if the patient is direct billed and \$8.10 if the optometrist charges the full schedule rate³⁴.

There is greater flexibility in the pricing of optical appliances, such as spectacles and contact lenses. There are no recommended prices and prices vary widely.

Financial, as distinct from legislative, barriers to entry should be considered when evaluating factors influencing access to services. The estimated costs of a new market entrant establishing an average suburban optometric practice are detailed in the Table below.

Table 6.1: Optometric practice establishment costs

Cost item	Description	Cost
Optometric examination equipment	Chair, stand, slit lamp, keratometer, direct and indirect opthalmoscope, Medmont field screener, fundus lenses etc	\$45,000
Work room equipment	Pliers, Heater, files etc (for edging equipment add \$15,000 second hand)	\$3,000
Office furniture (2 rooms)	Desks, shelving, computer tables, chairs	\$5,000
Office equipment	Fax, photocopier, phones, computer, eftpos, etc.	\$7,000
Office fit out	Partitions, plumbing, floor coverings, electrical, painting etc.	\$28,000
Business set up	Legal fees, lease, company establishment	\$3,000
Rent advance		\$3,000
Cash float		\$5,000
Stock		\$15,000
Total		\$114,000

Source: Optometrists Association of Australia – Submission March 2000

³⁴ Optometrists Association of Australia - Submission March 2000

Access to optometrist services is generally available throughout Queensland, either via services provided by full time, part time or visiting practitioners. As at 30 June 1999, there were 654 registered optometrists in Queensland, of which 87% or 569 practitioners had addresses within Queensland. Of the Queensland registrants, 262 were located within Brisbane with the remaining 307 optometrists located elsewhere in Queensland³⁵.

The Optometrists Association of Australia has provided data that indicates that in all cities and towns either an optometrist is permanently located or an optometrist visits³⁶. The distribution of optometrists throughout Queensland reflects population density with the Brisbane CBD featuring a total of 24 optometrists, including 23 permanent and one visiting practitioner, in contrast to locations such as Goodna with only one visiting optometrist. The Optometrists Association of Australia has indicated that there are as many as 50 rural and remote locations in Queensland that are only serviced by visiting practitioners as permanent operations would be unprofitable.

The Table below provides comparative statistics of access, level and value of services provided by optometrists in Queensland versus other States and Territories.

Table 6.2: Access and Level of Optometry Services

State	Number of optometrists	Population serviced	Consultations per optometrist	Average value of services
Queensland	419	8,117	1,748	\$67,238
New South Wales	809	7,755	1,603	\$62,141
Victoria	541	8,512	1,661	\$64,474
ACT	30	10,327	2,085	\$81,481
South Australia	151	9,800	1,966	\$75,881
Western Australia	206	8,728	1,648	\$64,971
Tasmania	57	8,307	1,789	\$68,324
National Benchmark	316	8,792	1,786	\$69,216

Source: Health Insurance Commission, ABS Household Expenditure Survey 1997-98 & Business Register

The Queensland market place employs 103 more optometrists than the national average. Each optometrist in Queensland provides service to 675 fewer persons per annum. Despite a smaller number of patients, Queensland optometrists evidently provide a larger number of repeat services with only 38 fewer consultations than the national average. In total over 730,000 consultations are provided by Queensland optometrists each year.

³⁶ Optometrists Association of Australia - March 2000

³⁵ Optometrists Board of Queensland, Annual Report 1998-99

Access to ophthalmologist services is restricted through the referral system. However referral is not uncommon with 6.1 per cent of all patients who visit an optometrist, referred to an ophthalmologist.³⁷ In 1998 there were a total of 102 practicing ophthalmologists in Queensland.

The Optometrists Association of Australia has indicated that "the community has a poor understanding of the qualifications optometrists posses, the work that optometrists do and the services to expect from optometrists. Generally consumers present for an eye examination due to the belief that they require glasses rather than to test also for ocular and systemic disease. The public has difficulty in distinguishing between optometrists, optical dispensers and ophthalmologists"³⁸. The issue of consumer knowledge is compounded, in part, by the large number of titles utilised within the market such as; optometrist, ophthalmologist, orthoptist, optical dispenser, optician, oculist, spectacle maker, ophthalmic optician, dispensing optician, eye specialist, eye doctor and contact lens practitioner.

Market Incumbents - Medical Practitioners, Optometrists

The impact of changing the regulatory environment for the prescription of optical appliances will depend, in part, on business structure. The Optometrists Association of Australia has indicated that there are many different business structures for optometric practice. Optometrists may be self-employed, partners in a practice or in an associate practice with other optometrists. They may be employees of other optometrists or of companies or of other corporate structures.

Many optometry practices include services which are restricted, such as prescription, but also services which are provided within a competitive market. For example, a significant number of optometry practices include a retail function. Many optometrists do not directly sell optical appliances and, instead, retail services are provided through links with a company or individual whose core business it is to sell spectacles.

Other Practitioners

Restrictions on the practice of optometry theoretically prevent other providers from undertaking a range of activities including, for example, "servicing of optical appliances". A key competition issue is the relationship between consultation and sale of optical appliances. which takes place in a competitive market, despite current restrictions.

Regulatory and Other Government Bodies

Many of the costs incurred by regulatory and government bodies are in relation to a wide range of matters, beyond issues of prescribing optical appliances. To that extent changes in relation to the restrictions on that practice alone may have little impact. The size of the potential benefits will depend, in part, on the current stance on enforcement in relation to practices other than prescribing.

 $^{^{37}}$ Submission provided by the Optometrists Association of Australia - March 2000

³⁸ Submission provided by the Optometrists Association of Australia - March 2000



6.3 Core Practices Model

The core practices model will restrict the prescription of optical appliances for the correction or relief of visual effects. The model provides a definition of optical prescribing and will restrict the practice to optometrists and medical practitioners. Title protection will be provided to registered optometrists and medical practitioners.

Consumers

Protection of consumers under the core practices model should be comparable to the base case. Similar restrictions that currently apply to prescription will apply under the core practices model. Non-legislative consumer protection arrangements supported by the Optometrists Association of Australia will also continue under the core practices model.

Implementation of the core practices model will reduce the current levels of legislative regulation. Practices, apart from prescription, will have restrictions removed and will therefore be opened up to competition. Because such practices have little risk attached to them such competition should be of benefit to the consumer. For example, the Review Team found that practices related to the fitting and servicing of optical appliances did not pose significant risks to consumers. However, the potential for increased competition may not be great. The current operating environment is effectively the same as if the practice restrictions were removed. Because of the structure of optometric businesses alternative service providers are already dispensing optical appliances and there are few complaints regarding that service. The restrictions are therefore having little impact on competition and could be removed with little impact.

It is not anticipated that there will be any beneficial impact in terms of consumer information under the core practices model. The competitive impacts are in auxiliary markets dealing with products rather than the service (prescribing optical appliances) being provided. In view of the Medicare arrangements, practitioners are likely to distinguish their services according to the products they provide, for example the range and price of optical appliances available. Prescription services are likely to remain unchanged from the base case.

Taking into account these considerations it is concluded that there would only be minor benefits in terms of price competition and consumer information. Consumer protection will be comparable between the base case and the core practices model.

Market Incumbents - Medical Practitioners, Optometrists

Implementation of the core practices model will not impact on incumbent practitioners. In terms of the core practice of prescription, there will no change from the base case. Prices will continue to be guided by the Medicare schedule.



Restrictions on non-prescribing activities will be removed, creating the potential for competition. However, as noted previously, many optometrists focus on prescribing and the removal of restrictions on non-prescribing activities will have little business impact on optometrists.

On balance, it is concluded that implementation of the core practices model would not impact on market incumbents.

Other Practitioners

Theoretically, other practitioners will be able to increase their current scope of practice due to 'prescribing optical appliances' being the only restriction on practice under a core practices model. Practitioners will be able to perform any service apart from prescription. As a consequence this could lead to positive employment impacts outside of the core practice definition. The ability to alter current resourcing approaches and increased competition could have a positive effect on prices. However, there is already price competition for non-prescribing activities such as the sale of optical appliances, and there is unlikely to be any additional benefit over the base case.

It is concluded implementation of the core practices model would have a minor impact on other practitioners.

Regulatory and Other Government Bodies

Under a core practices model it is anticipated that there will be a reduction in enforcement costs incurred by regulatory authorities and other government bodies because of reduced levels of regulation. Removal of practice restrictions in a core practices model would reflect current optometry practice arrangements and remove unnecessary regulation.

The direct impact on the Optometrists Board of Queensland is likely to be small. in light of the current small number of complaints and prosecutions.

There would be a minor benefit of reduced enforcement costs from implementing the core practices model. Some efficiencies would be achieved by removal of current unnecessary regulation.

Summary

The core practices model would restrict the prescription of optical appliances to optometrists and medical practitioners. Title protection will be provided to registered optometrists and medical practitioners.

Implementation of the core practices model will maintain levels of consumer protection. The core practices model would include similar restrictions to those that currently apply to prescription activities. Non-legislative arrangements introduced by the professional Associations, such as the Optometrists Association of Australia will continue under the core practices model.

Removal of current legislative restrictions on non-prescription activities will have little impact on competition. For example, implementation of the core practices model would remove restrictions on supply of optical appliances. However, alternative service providers are already supplying optical appliances and there are few complaints regarding that service.

Implementation of the core practices model will have no impact on incumbent practitioners. Theoretically, other practitioners will be able to increase their current scope of practice because prescription would be the only restricted practice. Practitioners, other than optometrists, would be able to perform any service apart from prescribing optical appliances. This could lead to positive employment impacts outside of the core practice definition. However, increasing numbers of optometrists are not involved in dispensing and, therefore, the removal of such restrictions may have little impact on competition.

Under a core practices model it is anticipated that there will be a minor reduction in enforcement costs incurred by regulatory authorities and other government bodies due to reduced levels of regulation. However, the actual degree of that reduction in costs is difficult to estimate. Title protection will continue under the core practices model. The Optometrists Board of Queensland will still administer all the current registration requirements. Complaints are small in number and this is unlikely to change under a core practices model.

6.4 Title Only Model

Under a title only model, only registered practitioners will be permitted to use specified professional titles. There would be no restrictions on the practice of prescribing optical appliances, nor would there be restrictions on any other practices.

In terms of the PBT assessment, many of the benefits of the title only model are similar to those of the core practices model. The additional costs and benefits of the title only model relate to the removal of restrictions on the practice of prescription.

Consumers

The potential scope for competition is greater under the title only model than under the core practices model. Under the title only model restrictions on prescription will also be removed. This represents an additional benefit over the core practices model. However, the key issue is whether such benefits are material and sustainable. There are several arguments as to why potential benefits may not be sustainable:



- 1. According to the Optometrists Association of Australia there are very few cases of unqualified people practicing optometry in Australia brought before the Boards. Unlike some of the other practices examined there is not a pool of practitioners ready to enter the market. Indeed there are still barriers to entry to the market. The Association has indicated that it would cost of the order of \$114,000 to establish an optometry practice.
 - 2. Almost all optometrists in Queensland have agreed to participate as providers of optometric care within the Medicare system. Participation in this scheme requires adherence to standards of practice and a schedule of consultation fees (if chosen by the optometrist).
- 3. Integration between the provision of optometric services and the sale of optical appliances exists. Therefore, to some extent the roles of the various practitioners have already been established, effectively reducing the scope for competition between optometrists and alternative service providers.

While it is not currently anticipated that in the short term unqualified practitioners would seek to prescribe optical appliances, this would become possible under a title only model. There would be a risk of harm to consumers from inaccurate or incomplete assessment and inappropriate prescribing by unqualified practitioners. The potential harms include deterioration of eyesight, failure to identify other health conditions (eg. diabetes), and the risk of harm to third parties through, for example, traffic accidents.

Research conducted by the Optometrists Association of Australia indicates that consumers have difficulty distinguishing between optometrists, ophthalmologists and optical dispensers. Consumers would therefore be likely to have difficulty identifying the appropriate practitioner to consult for an optical prescription if it was an unrestricted practice.

Taking into account these considerations it is concluded that there are only minor benefits for consumers in implementing. The title only model would represent a net cost by increasing the risk of consumer harm, while providing only minimal benefits from competition.

Market Incumbents - Optometrists, Medical Practitioners

In theory implementation of the title only model would not benefit the market incumbents. The title only model has the potential to reduce current levels of profitability for optometrists further than the core practices by introducing competition into the practice of prescribing optical appliances. However, as discussed above there may only be changes on the margin:

• the potential for cost savings will be limited. Setup costs for new entrants will be similar to the incumbents, in which short-term cost savings will be limited. The incentive to achieve cost savings is limited given the Medicare arrangements.

• changes in demand between optometrists and alternative service providers may have redistributive effect on employment. For example, currently there is a requirement for optometrists to oversee dispensing activities. The removal of such restrictions may change the way that optometrists are employed.

Balanced against these considerations is that removal of practice restrictions on prescription offers the opportunity for optical dispensers to employ non-optometrists to conduct prescribing, testing and dispense optical appliances.

It is concluded that there might be a minor impact on the businesses of optometrists resulting from the implementation of the title only model.

New Entrants - Other Practitioners

As with the core practices model, the title only model provides alternative practitioners with an increased scope of practice through the removal of current practice restrictions. Under this arrangement, registered and non-registered practitioners will be able to increase their current scope of practice. The key difference between the title only model and the core practices model is that such benefits will extend to prescription. As noted above, there is not a pool of practitioners who are expected to enter the market in the short term.

Regulatory and Other Government Bodies

The potential benefits will be commensurate with the core practices model. The title only model has the potential to reduce current enforcement costs for regulatory authorities and other government bodies. This is due to the removal of practice restrictions. However, the Optometrists Board of Queensland will still need to administer all the current registration requirements. Taking into account these considerations, the change in current workload of the Board will be minor.

Summary

Under a title only model only registered practitioners would be permitted to use professional titles. There would be no practice restrictions.

While the likelihood of entry of unqualified practitioners into the market would be limited, .there is potential for consumer harm. Research conducted by the Optometrists Association of Australia indicates that consumers have little knowledge of optometry and have difficulty distinguishing between groups such as optometrists, optical dispensers and ophthalmologists.

Theoretically the title only model creates greater scope for competition which may benefit consumers. However, it is unlikely that any potential competitive benefits are material or sustainable, as there is already competition in the market for sale of optical appliances. In addition, there is no pool of practitioners ready to enter the market as prescribers of optical appliances.

The title only model has the potential to reduce current enforcement costs for regulatory authorities and other government bodies. This is due to the removal of practice restrictions. However, protection of title is retained. The Optometrists Board of Queensland will therefore still need to administer all the current registration requirements.

The title only model would represent a net cost by increasing the risk of consumer harm, while providing only minimal competitive benefits.

6.5 Conclusions

There is a risk of harm associated with prescription of optical appliances. The incidence of risks will increase if unqualified persons compete against qualified practitioners by prescribing optical appliances. There are benefits for consumer protection in specifically defining prescribing as a core restricted practice and quarantining it from exposure to competition. This would maintain current levels of consumer protection while removing unnecessary regulation.

Despite the current practice restrictions, there is already competition in areas other than prescribing, and therefore minimal price benefits are expected in moving to a core practices model.

The core practices model is unlikely to present any significant benefits or costs for incumbent professions. As noted above, it is considered the scope for additional competition over and above that which is already occurring could be small. The core practices model would simplify regulation by removing unnecessary restrictions and would reflect the current market situation.

Under both the core practices and title only models it is anticipated that there will be a reduction in enforcement costs incurred by regulatory authorities and other government departments.

The Review Team has concluded that implementation of the core practices model provides the greatest public benefit by minimising risk for consumers and third parties.

Impact Matrix – Prescribing Optical Appliances

	BASE C	CASE	CORE PI	RACTICES	TITLE	ONLY
	Advantages	Disadvantages	Benefits	Costs	Benefits	Cost
Consumers	Consumer protection through restrictions on practice and on the use of professional titles. Good access to services	Poor consumer understanding of the different skills and expertise of optometrists, ophthalmologist s and optical dispensers	Consumer protection is comparable to the base case through restriction of the high risk practice, with no additional consumer cost (neutral)	• NIL	Increased consumer choice and access to prescribing services (minor impact)	Consumer protection reduced; potential for increased risk of harm from new (untrained) providers undertaking prescribing; exacerbated by poor consumer understanding of skills of eye care professions (minor impact) Risk to third parties if prescribing inaccurate (eg traffic accidents)
						(minor impact)
Medical Practitioners, Optometrists	Legislative arrangements insulate prescription services from competition	• NIL	• NIL	• NIL	• NIL	Potential for increased competition from alternative providers (minor impact)



Impact Matrix – Prescribing Optical Appliances

	BASE CASE		CORE PRACTICES		TITI	LE ONLY
	Advantages	Disadvantages	Benefits	Costs	Benefits	Cost
Other Practitioners	• NIL	Restrictions on the scope of services provided by alternative providers	• NIL	• NIL	Increased scope of practice and positive impact on business activities (minor impact)	• NIL
Regulatory and government bodies	• NIL	Costs of enforcement of the Acts	Reduced enforcement costs (minor impact)	• NIL	Reduced enforcement costs (minor impact)	• NIL



Surgery to the muscles, tendons, ligaments and bones of the foot and ankle

7.1 Practice Profile

Professional Profile

Surgery is a procedure that can involve the cutting, abrading, suturing, lasering, or otherwise physically changing body tissues and organs. Surgery can encompass treatments from removing moles from the skin to heart by-pass surgery. Generally a person who performs surgery is known as a "surgeon".

In assessing the practice of surgery to the muscles, tendons, ligaments and bones of the foot and ankle, the focus has been on two practitioner groups:

- orthopaedic surgeons; and
- surgical podiatrists.

Orthopaedic Surgeons

The Medical Act 1939, is currently under review and new legislation has been introduced into Parliament. The Act does not restrict the practice of medicine, rather, the Act prohibits anyone other than a registered medical practitioner from using the title of 'doctor', 'surgeon', 'physician', and a number of related titles. It also prohibits non-registrants from holding out, or implying, that they are a registered medical practitioner. Provisions of the Health Insurance Act 1973, which require medical practitioners to meet minimum proficiency requirements before any service provided by the practitioner can attract a Medicare benefit, also regulate medical practitioners.

Surgical Podiatrists

The *Podiatrists Act 1969* defines the practice of podiatry as:

the diagnosis and treatment by medical, surgical, electrical, mechanical or manual methods of ailments or abnormal conditions of the human foot, and includes a way of treatment declared, by regulation, to be podiatry.

There are exemptions from those restrictions on the practice of podiatry for doctors, and for nurses in a hospital setting. Title protection applies to the titles of 'podiatrist' and 'chiropodist', and extends to terms, which imply that the practitioner is qualified to practice podiatry.

Surgical podiatrists³⁹ perform a range of soft tissue and osseous procedures. According to Bennett,

members of the college are trained to perform a range of surgical procedures which include: the correction of toe deformities (hammer toes), claw toes, hallux abducto valgus (bunions), removal of nerve tumours (neuromas), excision of onychcryptosis (ingrown toenails) and some rearfoot procedures⁴⁰.

Generally these procedures are performed in a private hospital setting where there is full access to medical facilities including specialist medical services. According to the Australian College of Podiatric Surgeons (ACPS), its 22 members spend less than 10 per cent of their time performing surgical procedures. It should be noted that such rates are considerably lower than those of orthopaedic registrars.

Surgical podiatrists currently work in Queensland and elsewhere in Australia in small numbers. There are two surgical podiatrists practising in Queensland.

Current legislation does not address, specifically, the practices of surgical podiatrists or podiatric surgeons. Technically, the current use of the term 'surgeon' by podiatrists is a breach of the *Medical Act 1939*. However, the review team is not aware of any cases, which have been brought before the Medical Board of Queensland, relating to such a breach.

Risk of Harm

Surgery is an invasive procedure, and there are significant risks associated with the practice. The key risk associated with surgery relates to penetration of the dermis, particularly procedures, which are conducted below the sub-dermis. In contrast to other practices, surgery poses significant risks both for the patient and the practitioner. Risks are associated with general anaesthetic, poor surgical procedures and postoperative infection, and involve the transmitting of infections such as Hepatitis B, C and HIV.

The risks associated with contracting HIV through a needlestick injury are dependent upon the volume of blood inoculation and the severity of the injury. According to results published in 1996, one in 200 people who have incurred a needlestick injury containing HIV positive blood may contract a HIV infection⁴¹. It has been estimated that the risks of acquiring Hepatitis B and C virus from a contaminated needle is approximately three per cent and 30 per cent respectively⁴². These infectious risks are relevant to the consumer and practitioner.

⁴⁰ Bennett P J (1999), An Investigation into the Health Related Outcomes of Surgery Performed by Fellows of the Australian College of Podiatric Surgeons. (PhD Thesis submitted to the Queensland University of Technology, School of Public Health). p 20.

⁴¹ The Blue Book, Guidelines for the Control of Infectious Diseases, Infectious Diseases Unit, Public Health Division, Victorian Government Department of Human Services 1996.

³⁹ Podiatric surgeons are also referred to, within the market as surgical podiatrists.

⁴² RACS Policy Document Infection Control in Surgery . Management of AIDS (HIV) and Hepatitis B. February 1994 Appendix 11 pp. 14-16. Global Program on AIDS. Report of a WHO Consultation on the Prevention of HIV and Hepatitis B Virus Transmission in the Health Care Setting. Geneva 11-12 April 1991 WHO p1.

7.2 Base Case Analysis

The following analysis addresses the advantages and disadvantages associated with the current legislative arrangements. These advantages and disadvantages are examined for the key stakeholder groups – consumers, market incumbents, other competitors and regulatory and other government bodies.

Consumers

An advantage of the current legislative arrangements is the level of protection that is provided to the consumer. Current legislative arrangements provide this through:

- statutory definitions of practice (for podiatry only);
- title protection;
- a minimum standard of qualifications required for registration; and
- registrants are subject to procedures to deal with disciplinary matters and with practitioner impairment.

These arrangements are supported by non-legislative arrangements imposed by the professional Associations. For example, Fellows of the Australian College of Podiatric Surgeons (ACPS) are required to adhere to the ACPS Standards of Care document. The College also advocates continuous quality improvement and continuing education for its Fellows.

One measure of consumer protection is the number of complaints that are lodged with the respective professional Boards. The published evidence available suggests that complaints are low in number. During the 1998-99 financial year the Podiatrists Board of Queensland reviewed nine complaints; three related to unsatisfactory treatment, three related to advertising, and three were outside the jurisdiction of the Board.

There is some access restrictions to medical practitioner services. As at 30 June 1999 there were 7,603 medical practitioners and 3,582 medical specialists registered, of which 3,193 and 1,827 were located within Brisbane respectively. The remaining practitioners were located outside Brisbane or Queensland. Access to medical specialists who perform surgery is restricted by a referral system. According to the Australian Orthopaedic Association, there are 129 orthopaedic surgeons practicing in Queensland with an overall ratio of 3.8 orthopaedic surgeons per 100,000 population⁴³. Access to surgical podiatrists is via referral from a podiatrist, or general or specialist medical practitioner.

The costs associated with services provided by medical practitioners are dependent upon whether the practitioner performs the procedure within the public or private hospital systems.

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⁴³ Australian Orthopaedic Association - submission March 2000

In the private sector the cost is dependent upon whether the practitioner accepts the Medicare rebate or charges his/her own fee. Currently Medicare does not cover the services of podiatrists and surgical podiatrists. Hence, there is no hospital rebate available for theatre fees for surgical procedures performed by surgical podiatrists. A review is currently being conducted to ascertain whether this arrangement should be changed. According to the ACPS, a number of private health insurance companies currently provide rebates for podiatric services through ancillary cover. The Department of Veterans Affairs also provides some funding for podiatric surgery⁴⁴.

Under the current legislative arrangements there is an issue of consumer knowledge to be assessed. A study conducted by Gray indicates that there is a significant level of information asymmetry between practitioners and consumers in relation to the title and scope of practice performed by surgical podiatrists. The study was an investigation into the referral practices and patient attitudes to surgical podiatry in Western Australia. "The study used a sample of patients from the author's own practice...this comprised 145 patients who had 156 episodes of surgery with 277 individual surgical procedures performed"⁴⁵. Forty-three per cent of respondents to the survey indicated that podiatrists performed surgery. When queried on whether they were aware that surgical podiatrists were specialist podiatrists, 70 per cent of respondents to the survey answered "no". Eleven per cent of respondents thought surgical podiatrists were doctors. Thirty-one per cent of respondents thought they were podiatrists.

In relation to medical practitioners, consumers have a general awareness of the services they provide. As noted in the *Draft Policy Paper*, the absence of statutory restrictions on the practice of medical practitioners can be explained by:

- strong community and professional understanding of the types of matters that require the services of a medical practitioner;
- effective controls over the employment of non-registrants in medical officer positions in hospitals and other institutions; and
- perceived effectiveness of other statutory controls over potentially harmful elements of medical practice.

Medical Practitioners, Surgical Podiatrists

There are barriers to entry to the market for surgery to the muscles, tendons, ligaments and bones of the foot and ankle which confers some benefit to medical practitioners and surgical podiatrists.

Barriers to entry exist in relation to education requirements and acceptance into specialist training for medical practitioners, such as the requirements for orthopaedic surgeons. In addition to undergraduate training, additional pre-vocational training, vocational training and examinations are undertaken. Table 7.1 provides an indication of the post-graduate training requirements of the profession.

⁴⁴ Australasian College of Podiatric Surgeons (1999). Policy and Training Document. p. 5.

⁴⁵ Gray L A (1998) Referral Practices and Attitudes to Podiatric Surgery in Western Australia. Curtin University p. 30.

Similar barriers to entry exist for surgical podiatrists. To develop competency in the area of foot surgery, podiatrists must undertake further training with the ACPS. For candidates to gain registrar status they must have completed an undergraduate degree in podiatry, hold State registration, pass a number of prescribed postgraduate units, have a minimum of two years experience in podiatric practice and evidence of acceptance into a Masters degree (either by research or coursework). Registrars seeking Fellowship of the ACPS are required to undertake supervised practical training with satisfactory completion of a range of assessment tasks, including the completion of a Masters degree approved by the ACPS, and pass the Final Examinations.

Table 7.1: Educational Requirements for Select Surgical Medical Specialties*

Specialty	Qualifications
Basic Surgical Training	2 years commencing after the intern year including the satisfactory completion of the Part One Examination assessment
Orthopaedic Surgery	Basic surgical training + 4 year program including the satisfactory completion of the Part Two Examination and an orthopaedic principles and a basic sciences exam

^{*} Royal Australasian College of Surgeons - Choosing a Surgical Career

Other Practitioners

The definitions of practice applicable to podiatry are broad in structure and restrict the potential scope of the professional activities of alternative providers. These restrictions reduce the potential for employment opportunities and delivery efficiencies.

However, the impact of such restrictions on competition may be minor. As noted earlier, there is strong community and professional understanding of the types of conditions that require the services of a medical practitioner. There are other barriers to entry to the market, such as educational qualifications, which will have an impact on the ability of other practitioners to effectively compete in that market. In practice there are few alternative service providers which would be considered by consumers.

Regulatory and Other Government Bodies

The Medical Board of Queensland and the Podiatrists Board of Queensland have a role in establishing and maintaining professional standards and ensuring compliance with the legislation by all registered practitioners. These Boards have the ability to discipline registered practitioners who practice beyond the scope of their trained ability.

The current regulatory arrangements, if fully enforced, could impose an additional cost on the respective Boards and other government agencies. One example is the use of the term 'surgeon' by surgical podiatrists, which, technically, is in breach of the current *Medical Act* 1939. There have been no prosecutions to date, regarding this issue.

7.3 Core Practices Model

Applying a core practices model to surgery to specific anatomical regions of the body may be easier to implement than to surgery generally but it will produce policy and regulatory inconsistency. The proposed core practices model being considered will restrict the practice of surgery of the muscles, tendons, ligaments and bones of the foot and ankle. The model will provide a core practice definition and will restrict surgery to medical practitioners and surgical podiatrists. Title protection will continue for each of these professions. However, under this proposal other surgical procedures would continue to be unrestricted other than by title protection. An inconsistency is therefore produced where surgery, generally, is unrestricted except in a specific anatomical region.

Consumers

The core practices model would provide the same level of consumer protection as the base case. As is currently the case, only medical practitioners and podiatrists would be permitted to undertake surgical treatment of the foot. While surgery presents some risks, consumers understand those risks. There would be no change to the level of consumer protection from the base case.

The Review Team examined a range of information to determine whether there was evidence to indicate a significant risk of harm from surgery of the muscles, tendon ligaments and bones of the foot and ankle. The information available did not provide conclusive evidence of risk of harm.

However, the presence of surgical podiatrists in the market place raises to issues relevant to implementation of a core practices model:

- surgical podiatrists who undertake more complex foot and ankle surgery are using the title "podiatric surgeon". The term "surgeon" has normally been used to mean a person with medical qualifications who has specialised in surgery, and the use of the term by podiatrists may impact on consumers' ability to identify different practitioners; and
- surgical podiatrists are trained to undertake a range of procedures to the foot, but these skills are not as extensive as the skills attained by medical practitioners, especially those medical practitioners who have qualified in one of the surgical specialties.

Implementation of a core practices model would remove restrictions on podiatry practice, other than surgical procedures. In theory, other practitioners would be able to practice podiatry, which is currently defined as "the diagnosis and treatment by medical, surgical, electrical, mechanical or manual methods of ailments or abnormal conditions of the human foot, and includes a way of treatment declared, by regulation, to be podiatry". However there

are few alternative providers who are likely to compete with medical practitioners and podiatrists in providing general podiatric practices. The number of surgical podiatrists practicing in Queensland is small and, according to the ACPS, only 10 per cent of their time is spent performing surgical procedures.

It is concluded that any consumer advantages which might flow from greater competition would be minor.

Market Incumbents - Medical Practitioners, Surgical Podiatrists, Podiatrists

The core practices model would result in a decrease in regulation because of the removal of restrictions on the non-surgical aspects of podiatry. However, as noted above any increase in competition is likely to be minor. There are few practitioner groups who are likely to seek to compete to provide surgical services. If a core practices model restricted surgery of the muscles, tendons, ligaments and bones of the foot to medical practitioners and appropriately trained podiatrists, it is possible that podiatrists may seek to increase their currently low level of surgery of the muscles, tendons, ligaments and bones of the foot. However, as podiatrists are not currently prevented from undertaking this surgery any competitive impact would be minor.

The core practices model would theoretically increase competition for podiatrists in nonsurgical treatment, where practice restrictions would have been removed. However, as noted above, because there are few alternative providers of treatment, any increase in competition will be minor. The most likely source of competition is from medical practitioners and nurses who are exempted from the current podiatry practice restriction. For example, the exemption for nurses applies in a hospital context. However, such impacts will be minor. Medical practitioners and nurses do not currently compete with podiatrists to any significant degree and it is not anticipated that treatment practices would change to any significant degree under a core practices model.

It is concluded that the impact on market incumbents from implementing the core practices model would be minor.

Other Competitors

The core practices model will restrict the practice of surgery on the muscles, tendons, ligaments and bones of the foot and ankle to medical practitioners and surgical podiatrists. By removing restrictions on all practices except surgery, as defined, there will be a theoretical opportunity for registered or unregistered practitioners (practitioners other than podiatrists) to enter the market to perform unrestricted practices. However, as noted above, the competitive effects will be minor. There are few practitioners groups likely to enter the market.

It is arguable that practitioners other than podiatrists would have difficulty in forming a viable business based on the practices they could safely perform. The establishment of separate businesses in competition with podiatrists is unlikely.

It is concluded that there would only be minor benefits for competitors from implementing the core practices model.

Regulatory and Other Government Bodies

The activities of the Medical Board of Queensland and the Podiatrists Board of Queensland would not be altered to any significant extent under the core practices model. The respective Boards would have an ongoing role in establishing and maintaining professional standards and ensuring compliance with the legislation by all registered practitioners. Instead of enforcement of the requirement that only registrants practice within the statutory definition of podiatry, the regulatory role would be to enforce the core practice restriction on surgery of the muscles, tendons, ligaments and bones of the foot and ankle.

It is concluded that there would be no impact on regulatory bodies from implementing the core practices model.

Summary

One issue to be addressed in the case of the core practices model is its practicality of implementation. There are considerable difficulties associated with attempting to define 'surgery' so that restricting surgery to those practitioners who are safe can be considered. While most people associate 'surgery' with invasive procedures performed by specialist medical practitioners, there are many procedures performed by other practitioners that might be captured by a broad definition of 'surgery'. They include procedures undertaken by tattooists, acupuncturists, nurses, dentists, podiatrists and medical practitioners. A broad legislative definition of 'surgery' would be likely to 'capture' some of those procedures which do not, on health and safety grounds, need to be restricted to particular practitioners. It would not be practical to develop and maintain an up-to-date and exhaustive legislative definition of all surgical procedures. These definitional problems mean that a core practices model is not an appropriate mechanism to restrict the practice of 'surgery' generally.

There is no current legislative restriction that prevents people other than medical practitioners from undertaking 'surgery'. Instead, legislation prevents a person who is not registered as a medical practitioner from calling themselves a "surgeon" (dental surgeons are exempted from this restriction). This restriction on the use of the title, combined with the educational and training requirements for registration as a medical practitioner, means that consumers are not exposed to the risk of choosing an untrained person to undertake an operation such as an appendectomy. In addition to consumers' good level of information about which practitioners are trained to undertake surgery, a number of other mechanisms, such as the Medicare system and referral to specialists by general practitioners, reinforce consumer protection.

The Review Team concluded that the application of a core practices model to restrict the practice of surgery of the muscles, tendons, ligaments and bones of the foot and ankle would produce an inconsistency with the regulation of other surgical procedures which would continue unrestricted other than through title protection. The problems created by this regulatory inconsistency outweigh any benefits of the core practices model.

There is minimal justification on health and safety grounds for restricting surgery of the muscles, tendons, ligaments and bones of the foot and ankle, given only medical practitioners and podiatrists would be permitted to undertake surgical treatment of the foot. There is little evidence of harm and it is difficult to foresee that consumer protection would be improved under a core practices model.

The core practices model would increase competition for podiatrists in non-surgical treatment, where practice restrictions would have been removed. However because there are few alternative providers of treatment, any increase in competition will be minor.

The activities of the Medical Board of Queensland and the Podiatrists Board of Queensland would not alter to any significant extent under the core practices model. The Boards would have an ongoing role in establishing and maintaining professional standards and ensuring compliance with the legislation by all registered practitioners. The regulatory role under the core practices model would be to enforce the core practice restriction on surgery of the muscles, tendons, ligaments and bones of the foot and ankle.

7.4 Title Only Model

Under a title only model, only registered practitioners will be permitted to use specified professional titles. Other than title protection there are no restrictions on the practices of the professions.

Consumers

Current regulation of surgery is primarily through restrictions on use of titles (e.g. "surgeon"). The practice of podiatry, which includes surgery, is currently restricted to podiatrists. This restriction would be removed in a title only model.

A key issue for consumers in a title only model is enforcement of the restrictions on who can use specified titles. Title restrictions are intended to protect consumers by ensuring that only appropriately qualified and registered practitioners use the restricted title. If a range of practitioners with different qualifications and competencies use the same title, there is the potential to create confusion for consumers. As noted previously, the restriction on who can use the title 'surgeon' has worked effectively as a mechanism to protect consumers of surgery. Therefore, enhancement of consumer protection through implementation of the title only model is dependent on restrictions on the use of the title 'surgeon' being enforced.

The title only model would remove restrictions on competition in the market for podiatry services and for surgery of the muscles, tendons, ligaments and bones of the foot. While the potential for unregistered practitioners to enter the market is small, a title only model requires consumers to be aware that use of titles like 'podiatrist' and 'surgeon' is available only to practitioners who are qualified and registered.

It is concluded that consumers would enjoy only minor benefits in terms of consumer choice and price competition.

Medical Practitioners, Surgical Podiatrists, Podiatrists

Implementation of the title only model may produce minor costs for market incumbents. In the case of medical practitioners, the title only model does not change the conditions of the base case. Title protection is a common element of both the base and the title only model. There are therefore no incremental benefits and costs from moving to the title only model from the base case.

Implementation of the title only model has similar impacts to those of the core practices model on the practice of podiatry. The core practices and title only models introduce the potential for alternative practitioners (to registered podiatrists) to increase their scope of practice. As already discussed in the context of the core practices model, whilst increased competition is theoretically possible, the key issues are whether it can emerge or whether it is sustainable. It was concluded in the analysis of the core practices model that the potential for increased competition was limited.

It is therefore concluded that implementation of the title only model would produce minor costs for market incumbents.

Other Competitors

The title only model will remove all restrictions applicable to the practice of surgery on the muscles, tendons, ligaments and bones of the foot and ankle. By removing restrictions on all practices there will be a theoretical opportunity for registered or unregistered practitioners (practitioners other than podiatrists) to enter the market to perform unrestricted practices. However, the competitive effects will be minor as there are few practitioners groups likely to enter the market.

Practice viability, for practitioners other than podiatrists would be based upon the practices they could safely perform. The establishment of separate businesses in competition with podiatrists is unlikely.

It is concluded that implementation of the title only model would produce minor benefits for other competitors.

Regulatory and Other Government Bodies

The title only model has the potential to reduce current enforcement costs for regulatory authorities because of the removal of practice restrictions on podiatry.

Under this option the Medical Board of Queensland and the Podiatrists Board of Queensland would continue to have the ability to discipline registered practitioners whose conduct is unsatisfactory or unprofessional. As in the base case, the respective Boards would have the capacity to prosecute unregistered practitioners who use a restricted title (e.g. 'podiatrists' or 'surgeon'). However, they would not have jurisdiction in respect of unregistered practitioners who undertake surgery or practice 'podiatry', unless they use a restricted title.

It is concluded that there would be a minor reduction in enforcement costs under the title only model.

Summary

Under the title only model current market conditions for the practice of surgery will remain unchanged. However, restrictions on the practice of podiatry will be removed. There is little evidence of harm arising from the current consumer protection arrangements. It is therefore difficult to foresee that the level of consumer protection would change.

The Review Team concluded that the restriction on who can use the title 'surgeon' has worked effectively as a mechanism to protect consumers of surgery. Any improvement in consumer protection, from the implementation of a title only model, is dependent on restrictions on the use of the title 'surgeon' being enforced.

The title only model would remove restrictions on podiatry services and surgery of the muscles, tendons, ligaments and bones of the foot. While the potential for unregistered practitioners to enter the market is small, a title only model requires consumers to be aware that use of titles like 'podiatrist' and 'surgeon' is available only to practitioners who are qualified and registered.

The title only model introduces the potential for alternative practitioners (to registered podiatrists) to increase their scope of practice. Whilst increased competition is theoretically possible, under the title only model, the key issues are whether it can emerge or whether it is sustainable. It was concluded in the analysis that the potential for increased competition was limited.

Under this option the Boards would continue to have the ability to discipline registered practitioners whose conduct is unsatisfactory or unprofessional. Also the Boards would have the capacity to prosecute unregistered practitioners who use a restricted title (e.g. 'podiatrist' or 'surgeon'). However, the Boards would not have jurisdiction in respect of unregistered practitioners who undertake surgery or practice 'podiatry', unless they use a restricted title.

7.5 Conclusions

In the case of surgery to the muscles, tendons, ligaments and bones of the foot and ankle, the title only model is the preferred option.

A core practices model would lead only to theoretical improvements in competition in services providing surgery of the muscles, tendons, ligaments and bones of the foot. As there would be a negligible impact on consumer protection, a core restricted practice of surgery of the muscles, tendons, ligaments and bones of the foot is unnecessary.

There are practical difficulties in implementing the core practices model. Successful implementation of the core practices model is reliant on a precise definition of the restricted core practice. It has been concluded that it was impractical to define surgery and that definitional problems mean that a core practices model is not an appropriate mechanism to restrict the practice of surgery generally. The application of a core practices model to restrict the practice of surgery of the muscles, tendons, ligaments and bones of the foot and ankle will produce an inconsistency with the regulation of other surgical procedures which would continue unrestricted in a core practices model.

There is minimal justification, for restricting surgery of the muscles, tendons, ligaments and bones of the foot and ankle under a core practices model. The incidence of harm from surgery is small and the consumer protection arrangements currently in place will continue. It is therefore difficult to foresee that consumer protection under a core practice model would improve.

The title only model incorporates the benefits of the base case (in relation to surgery) and the benefits from removing practice restrictions from podiatry. As indicated by the data presented in the base case there have been no reported complaints made to the respective Boards relating to the practice of surgery, indicating that current restrictions are meeting the consumer protection objectives of the legislation.



Impact Matrix – Surgery to the Muscles, Tendons, Ligaments and Bones of the Foot and Ankle

	BASE	CASE	CORE P	RACTICES	TITLE	EONLY
	Advantages	Disadvantages	Benefits	Costs	Benefits	Cost
Consumers	Consumer protection through restrictions on practice and on the use of professional titles (for podiatry), and through restrictions on use of professional title only (for surgery) Good consumer knowledge regarding medical practitioners	Poor consumer knowledge regarding surgical podiatrists Access to medical specialists is dependent on referral system and geography	Consumer protection for surgery comparable to base case (neutral) Increased consumer choice and access to services (minor impact) Increased price competition in areas where restrictions have been removed (minor impact)	Policy and regulatory inconsistency if surgery on one part of the anatomy is restricted. Practical problems with implementation (major impact)	Consumer protection for surgery comparable to base case (neutral) Increased consumer choice and access to services (minor impact) Increased price competition in areas where restrictions have been removed (minor impact)	• NIL
Podiatrists, Medical Practitioners, Surgical Podiatrists	Legislative arrangements insulate practitioners from competition	• NIL	• NIL	Increased competition for podiatry services from alternative practitioners (minor impact)	• NIL	Increased competition for podiatry services from alternative providers (minor impact)



Impact Matrix – Surgery to the Muscles, Tendons, Ligaments and Bones of the Foot and Ankle

	BASE	BASE CASE		CORE PRACTICES		ONLY
	Advantages	Disadvantages	Benefits	Costs	Benefits	Cost
Other Practitioners	• NIL	• Restricts the scope of services provided by alternative practitioners	Increased scope of practice (minor impact)	• NIL	Increased scope of practice (minor impact)	• NIL
Regulatory and government bodies	• NIL	Costs of enforcement of the Acts	• NIL	Practical problems with implementation (major impact)	Reduced enforcement costs (minor impact)	• NIL



8
Conclusions



The Terms of Reference for this Report required that the core practices model, comprising five practices, contained in Queensland Health's *Draft Policy Paper* be reviewed and refined. To undertake this review a risk of harm framework was developed and eight focus groups were conducted. Based on this process the Review Team recommended that three practices be considered for inclusion in a core practices model:

- thrust manipulation of the spine;
- prescription of optical appliances; and
- surgery of the muscles, tendons, ligaments and bones of the foot and ankle.

Because implementation of the core practices model will involve restrictions on practice, the three proposed practices were subject to a PBT assessment. This assessment examined the benefits and costs of three alternatives for each practice:

- a continuation of the existing arrangements the base case;
- a core practices model; and
- a title only model.

Implementation of the core practices model is recommended for the practice of thrust manipulation of the spine. This model will maintain current levels of consumer protection and encourages competition in practices other than thrust manipulation of the spine which would be unrestricted under this model. The model will benefit alternative service providers because of their ability to increase their current scope of practice. There will be a reduction in enforcement costs incurred by regulatory authorities and other government bodies. However, it was concluded that all potential benefits would be minor in nature.

For the practice of prescribing optical appliances the greatest public benefit will be achieved under a core practices model. As with the practice of thrust manipulation of the spine, under the core practices model consumers will enjoy comparable levels of protection to current market arrangements and increased competition in practice areas where practice restrictions have been removed. However, it was noted that such impacts would be minor in nature. There will be minor impacts upon market incumbents and some minor benefits for new market entrants. A minor reduction in enforcement costs incurred by regulatory authorities and other government bodies will occur under this model.



A title only model is recommended for the practice of surgery of the muscles, tendons, ligaments and bones of the foot and ankle. The Review Team concluded that it would be impractical to define surgery for the purposes of implementing a core practices model and that it would be inconsistent to apply restrictions to surgery to a defined part of the anatomy whilst other forms of surgery were unrestricted. In addition, under the title only model the advantages of the current arrangements relating to surgery are maintained and further benefits are achieved from removing practice restrictions on podiatry. Podiatrists could face increased competition as practice restrictions on non-surgical treatment would be removed. However, it was concluded that such competitive impacts would be minor. There will be a minor reduction in costs for regulatory and government bodies under this model.