

Unintended outcomes of health care delivery and the need for a national risk management approach

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Abstract

Unlike the situation in occupational health and safety, there is no nationally coordinated approach to risk management to prevent unintended outcomes of health care provision and improve health care quality. There is a related absence of linkages between quality assurance processes, other programs aimed at patient injury prevention and professional indemnity insurance systems. This article discusses the Australian health policy direction and argues for a coordinated national health risk management approach developed through contract requirements which include duty of care and information provision, nationally approved standards and codes, professional liability requirements, and supporting health education, research and information technology development.

Introduction

Economists have argued that information is necessary for effective operation of the market. Information is equally necessary for risk management, which involves the identification and control of diverse risks of production in a way which promotes continuous improvement in all aspects of business operation. This article compares the regulatory approach to preventing injury to workers and others at the workplace with that taken to protection of health care consumers. Inequality in the employment relationship springs primarily from responsibility for direction of work. In the health provider–client relationship it springs from inequalities in knowledge and health. With increasing government requirements for competition in activities which could generate harm to workers, clients or members of the public, the most equitable and effective way of preventing

unintended consequences of health care provision, improving patient outcomes and containing cost is likely to be a national, integrated risk management approach. This is discussed in the light of recent policy development on safety and quality in Australian health care.

Risk management

Risk management is the term applied to a logical and systematic method of identifying, analysing, assessing, treating, monitoring and communicating risks associated with any activity, function or process in a way that will enable organisations to minimise losses and maximise opportunities (Standards Australia/Standards New Zealand 1994). It begins with the establishment of the strategic, organisational and risk management context in which the work process will take place. The next step is to identify and analyse risks in order to assess, prioritise and treat them appropriately. The final step is to monitor and review the performance of the risk management process to provide a new baseline for future action.

It is generally most equitable, efficient and effective to manage risks to workers, clients, the public, the environment and the business in an integrated fashion, because a particular hazard may pose a range of risks and its identification may generate many ideas to improve service delivery. For example, State WorkCover Authorities promote integrated management of occupational health and safety and workers' compensation requirements in order to achieve a cycle of data-driven injury prevention and workplace rehabilitation improvement which will reduce the social and economic cost of injury at work. The Australian Council on Healthcare Standards (ACHS) takes an integrated management approach in its Evaluation and Quality Improvement Program, which provides a range of process- and outcome-related standards to assist audit in the health industry (ACHS 1997). The Australian Patient Study Foundation (APSF) also takes a coordinated management approach in its incident report form, which health service providers may use instead of conformity with a wide variety of other federal and State reporting requirements relating to the health and safety of patients, visitors, carers or other people at the hospital such as students, staff, contractors and volunteers (APSF 1997).

The national context: Competition, national standards and data-driven management

In 1991 the newly established Council of Australian Governments agreed to mutual recognition of State and Territory laws and regulations where national standards were not seen as essential to the working of the national economy. The council also called for the development of national agreement on standards and administrative systems for occupational health and safety, dangerous goods, the environment, health-related occupations and training, disability services, social security benefits and labour market programs. (Premiers and Chief Ministers 1991). In 1995 the Competition Policy Reform Act was passed, following the recommendations of the Hilmer Report (Independent Committee of Inquiry 1993). This argued that universal and uniformly implemented rules of market conduct should apply to all market participants regardless of the form of business ownership, unless another course of action could be shown to be in the public interest. Governments are progressively reviewing legislation in order to meet these requirements (Fels 1996).

The need to develop national health standards and supporting risk management structures has increased as a result of national competition policy because, in the absence of reliable information about the quality of health care services and their outcomes, competition must primarily be based on price. Currently, the huge variety of inconsistent regulatory, funding and administrative arrangements adopted across Australia's nine legislative jurisdictions has made comparison of service outcome and administrative efficiency impossible, increased the cost of doing business, and encouraged cost shifting (Brennan & Deeble 1993). The Industry Commission (1994) recommended a national approach to workers' compensation regulation which was supported by State Heads of Workers' Compensation Authorities (1997). The national inquiry into private health insurance noted the deleterious effects of the plethora of inconsistent Commonwealth and State regulation on the health sector, and the Industry Commission recommended further review with broader terms of reference (Industry Commission 1997).

United States style prospective payment systems which entail a fixed-fee method of reimbursing hospitals, based on the average cost of treatment for a specific diagnosis, have now been introduced. The Review of Professional Indemnity Arrangements for Health Care Professionals (1995) found a wide range of problems in the current approach to managing risks to patients and dealing with the effects of unintended consequences of health care provision, including an inadequate outcome focus and evidentiary basis for many health care treatments.

The undertaking of many quality-directed activities, with few of them being data-driven and few involving an information-action-monitoring cycle that could lead to improved health care over time, was also noted. There was found to be a lack of meaningful information upon which health care consumers could base their choice of health care provider, and upon which health care institutions could grant practising rights to ensure provision of quality care to patients (Review of Professional Indemnity Arrangements for Health Care Professionals 1995). Many of the report's 169 recommendations relate to correcting absence of data and lack of communication about health.

Economists have pointed out that perfect information is necessary for perfect operation of the market. It is equally necessary for perfect identification and control of risks to health, and for evaluation of health care provider performance outcome. In the absence of reliable information, the exercise of consumer choice is more like gambling than action which will lead to the continuous improvement of service quality as a result of competition by service providers. Without clear national standards and effective, transparent risk management structures, there is a danger that critics of the prospective payment system will be correct in seeing it as a tool for price cutting, which will lead to increased misery, cost and cost shifting, rather than to continuous improvements in service delivery, health outcome and cost containment.

New requirements for competition may just mean more red tape. For example, both the Commonwealth and States have legislation which guarantees privacy, as well as legislation which guarantees freedom of information (Attorney-General's Department 1995; Parliamentary Counsel's Office 1996). Requirements of these Acts do not apply equally to public and private sector organisations. The Privacy Amendment Bill (1998), which seeks to apply the Commonwealth Privacy Act (1988) to personal information held by contractors in relation to services provided to the Commonwealth, was recently under discussion. The Bill sought to ensure that 'the existing protections which are afforded to a producer by the Privacy Act are not lost when services are delivered under contract' (Senate Legal and Constitutional References Committee 1998).

Among other things, the Privacy Act ensures privacy regarding the details of commercial contracts. However, public ignorance about commercial matters may lead to contract award to mates, perhaps at inflated prices. Contracts may also be made at prices so low that standards to protect health, welfare and the environment cannot be met. By this means the contractor may gain an unfair competitive advantage and shift the costs of production to the individual, the premium holder or taxpayer. Secrecy about the award of contracts means an inability to identify and compare the outcome of contractor performance in order to select the best performers for future work.

It is important for personal information about clients, as distinct from contractors, to be confidential. If it is not, people might be subject to exploitation, harassment or humiliation. On the other hand, this problem has been somewhat reduced by the passage of Commonwealth and State discrimination legislation, and health practitioners need reliable information about clients' problems in order to assist their management. The best way of ensuring that the personal information of clients is kept private is by dealing with the issue in codes of practice in Commonwealth freedom of information legislation, which should apply across the public and private sectors. Privacy issues covered in codes of practice should include the collection, storage and security of personal information, access to and alteration of personal information, and its disclosure. In general, the availability of clients' personal information should depend upon the legitimate use of the information collected, and on personal consent to its use.

Key features of the occupational health and safety risk management model

State Occupational Health and Safety Acts were introduced across Australia during the 1980s. They provide all employers with a duty to ensure the health, safety and welfare of workers and other people at the workplace, such as visitors or contractors, as far as is reasonably practicable. Providers of work-related plant and substances also have a duty of care. Workers are required to work safely. Slightly later, State governments amended Workers' Compensation Acts to require workplace-based rehabilitation of the injured. In New South Wales, government is the workers' compensation insurance underwriter, and the WorkCover Authority manages both Acts in partnership with about 14 licensed insurance companies which are paid to collect and invest premiums, administer claims and dispatch claims data to government. The regular production of a national compendium of workers' compensation statistics by the tripartite National Occupational Health and Safety Commission provides the major source of industry and occupation-based information about risks (Foley 1997). It can be used at the workplace to assist risk identification and control, in conjunction with other practices such as worker consultation, inspection, hazard and incident reporting, and first aid recording (Butrej & Douglas 1995).

An employer is expected to identify and control risks in consultation with workers who have been provided with information and training. Products such as the New South Wales WorkCover's Hazpak pamphlet (1997) provide a practical guide to risk identification, prioritisation and control, especially for small and medium businesses. A worker must not be dismissed or treated

detrimentally for making a complaint or being an elected member of a workplace safety committee, which must be established in workplaces with over 20 workers if a majority of workers request it. Some States require elected workers' representatives in workplaces with over five workers.

Elected representatives have the right to inspect the workplace at any time and immediately after an accident. Inspectors from the WorkCover Authority currently provide information to assist carriage of the duty of care and resolution of complaints. They also audit high risk and poorly performing areas of industry. They provide on the spot fines and issue prohibition and improvement notices, investigate, and take prosecutions under the Occupational Health and Safety Act. In New South Wales, prosecutions can be launched by private persons with the written consent of the Minister, by government inspectors or secretaries of trade unions. A problem is that the greatest economic cost of injury at work, which may also lead to permanent disability, is work-related sprain and strain, and other problems which are often of slow onset. The prevention of such injuries is often overlooked in the administration of Occupational Health and Safety Acts (Industry Commission 1995).

State government regulation of premium price ideally should provide insurers with incentives to compete for market share through the provision of effective risk and rehabilitation management services. Unfortunately, the lack of sufficient commitment to managing risks at the enterprise level, and the lack of effective communication and transparent outcome data gathering on the performance of health, rehabilitation, dispute resolution and insurance providers, currently hinders achievement of this goal (Kenny 1995; Grellman 1997).

Insurer underwriting and competition on premium price would be likely to increase such problems (New South Wales Government 1986; Standing Committee on Law and Justice 1996a). The combination puts a downward pressure on benefits, which may increase the likelihood of long-term unemployment for injured workers, cause spiralling court awards and costs, cost shifting, business instability, and insurer insolvency at unfavourable periods of the underwriting cycle. New South Wales businesses have paid for past insurer failures through increases in their premiums. Private sector underwriting and competition on premium price have also been shown to increase general administrative costs because of re-insurance made necessary by break-up of the premium pool, the need for higher profits as solvency margins, and the entry of brokers into the system (WorkCover Authority of NSW 1993).

There is an increasing emphasis on management systems audit as a means of promoting effective risk management. The Victorian WorkCover's SafetyMAP occupational health and safety management system has been widely promoted

and was also recently adopted into Indonesian legislation. It is based on Australian and New Zealand safety management standards, which also conform with international standards to promote good management, such as the guidelines on quality management and quality systems elements (ISO 9004.1) and the guidelines on principles, systems and supporting techniques for environmental management systems (ISO 14004).

An increasing range of national standards and codes of practice are readily available from WorkCover offices and from the Australian Standards Organisation. If a standard is called up in an occupational health and safety regulation it must be strictly adhered to. Codes of practice are increasingly being developed. They can be used as evidence that an employer was carrying out the duty of care. Managers are expected to implement relevant codes, unless they can show that an alternative method of work is just as safe or safer. An advantage of codes over legislation is that they can be developed comparatively quickly for use in specific situations. Legislation may reduce safety and productivity if improved products or practices breach specific legislative requirements and there is resistance to their use because of this.

Health care contracts and industry-based monitoring

The Commonwealth and States have committed themselves to work in partnership to establish a nationally consistent Australian national diagnosis related groups funding, management and information system which serves as the foundation for a national health information network, developing health goals and targets and national health quality measures (Australian Government Solicitor 1993). The National Expert Advisory Group on Safety and Quality in Australian Health Care (1998) recommended that Health Ministers lead the way in promoting a safety and quality enhancement ethos throughout the whole health system. They suggested that national requirements for health care organisations to develop, maintain and review readily accessible consumer information could be specified through government health care agreements and related contracts.

A contractual approach appears useful for implementing national objectives related to health promotion as well as health care provision, and for providing contractors with economic incentives for goal attainment. In general, laws should establish minimum standards which contracts should meet or surpass. However, national contract requirements outlined by elected Ministers may have a higher authority than existing law. The test of all law and contracts might most appropriately be seen as their consistency with the public interest.

There appears to be good reason to take a national contractual approach to health education, research and development. In the absence of incorporation of national competency standards into all professional education, commercial pressures on universities must undermine the confidence of professions, consumers, students and taxpayers that education continues to provide effective preparation for service provision and value for money. A nationally coordinated higher education partnership between education and health care providers should identify, teach and assess key competencies, including risk management, and provide a team-based approach to the provision of care.

Effective risk management data gathering systems provide a good mechanism for identifying research needs and prioritising them for funding purposes. Their development might assist the Australian Research Council which, according to the Review of Higher Education Financing and Policy (1997), has yet to implement significant priority setting procedures or to initiate collaboration in research and development priority setting with other advisory and research performance agencies. The Australian Research Council currently allocates research resources to the field in proportion to historical shares. Effective risk management data systems are also crucial for improving Australia's trade performance (Information Industries Taskforce 1997).

The National Health and Medical Research Council (NHMRC) appears to be well placed to provide independent, coordinated advice to government and the community on the development and progress of a range of health-related contracts let by government on behalf of the community. The NHMRC's strategic intent is to work with others for the health of all Australians, by promoting informed debate on ethics and policy, providing knowledge-based advice, fostering a high quality and internationally recognised research base, and applying research rigour to health issues (NHMRC 1998).

Integrated risk management in health care provision

The health practitioner or organisation should be provided with a duty to give expert care and correct information, to a reasonably practicable extent. A patient or client might be provided with a duty to give correct information and to act in a manner consistent with health improvement, as far as is reasonably practicable. The health practitioner might be required to demonstrate appropriate levels of expertise in a specified area, and to diagnose, treat and identify and control risks to patient recovery, in consultation with the patient and relevant others. Carriage of the practitioner's duty might involve evidence of having undertaken nationally specified forms of competency-based education.

Appropriate use of computerised literature searches associated with the practice of 'evidence-based medicine' (Evidence Based Medicine Working Group 1992), and participation in appropriate quality management activities, including development and implementation of patient pathways of care, might be related key aspects of the practitioner's duty. Pathways are a simple recording tool that use the risk management approach to enable a health care team to manage and audit its care for patients as individual and groups, in order to continuously improve care (Johnson 1997).

Health care purchasers might expect health service organisations to undertake incident monitoring and participate in national studies such as that being currently undertaken by the APSF. In this study the recording of adverse events is done anonymously by people in the hospital, and the information is sent to the Australian Bureau of Statistics prior to it being provided to the APSF, free from all identifiers regarding its origin. This environment-centred approach to identification and control of risk might be augmented by other patient-centred approaches. For example, organisational identification and use of criteria which have been established as defining patients who are at a high risk of suffering preventable deaths may be undertaken. Staff are trained to recognise such signs and immediately call upon rapid response expert teams to deal with them (National Expert Advisory Group on Safety and Quality in Australian Health Care 1998).

Implementation of relevant national standards, guidelines or codes of practice might also be expected. Investigation should be undertaken of whether Australian practitioners could usefully gain Internet access to the United States National Guideline Clearinghouse, which has the mission of providing physicians and other health professionals, health care providers, health plans, integrated delivery systems, purchasers and others with an accessible mechanism for obtaining objective, detailed information on clinical practice guidelines, and to further their dissemination, implementation and use (Slutsky 1998). The quality in Australian health care study reviewed over 14 000 patient admissions in 28 hospitals in New South Wales and South Australia and found that 16.6% of patients were involved in an adverse event, of which half were assessed as highly preventable. This was compared with the Harvard Medical Practice Study which reviewed over 30 000 inpatient medical records from 51 acute care hospitals in the United States, showing that adverse events occurred in 3.7% of hospitals and that many were the result of sub-standard care (Wolf 1996). Participation in studies such as these might be an ongoing condition of receiving government funding.

The final report of the task force on quality in Australian health recommended a study of information technology needed to improve links between health care

providers, with special attention to hospitals, general practice, pharmacies and home and community care. It suggested that the introduction of voluntary patient held 'smart cards' for records should be the subject of pilot studies (Australian Health Ministers' Advisory Council 1996).

The development of a longitudinal patient record is crucial for more effective risk management of individual and population health. It would offer reliable treatment histories, which are often currently unavailable, and a comparatively non-intrusive means of assisting the identification and control of treatment risks and comparing outcomes in order to improve them. It could improve the reliability and utility of national performance indicators of care quality which are currently used. These are rate of emergency patient re-admission within 28 days of separation; rate of hospital-acquired infection; rate of unplanned return to theatre; patient satisfaction and the proportion of beds accredited by the ACHS (Australian Institute of Health and Welfare 1996). The universal Medicare system provides a good structural base on which to build.

By mid-1996 the ACHS had accredited a total of 644 public and private hospitals, day surgeries, nursing homes and other establishments throughout Australia and had worked with the community health accreditation and standards program and the area integrated mental health services standards project to develop standards in these areas (ACHS 1996). Prior to 1987, ACHS standards had an organisational process orientation. The recently developed Evaluation and Quality Improvement Program audit places a greater emphasis on continuous improvement in the quality of care. It has a three-year cycle comprising the components of self-assessment; periodic review; organisation-wide survey; survey report; and quality action plan.

The ACHS Care Evaluation Program aims to develop clinical indicators in each medical discipline and was established to include a clinical component in accreditation to encourage clinician involvement in quality assurance and to develop a national database of patient care processes, outcome information and trends (National Expert Advisory Group on Safety and Quality in Australian Health Care 1998). Generic health-related quality of life measures, based on client self-report, that might be used for comparisons across disciplines and conditions are also being discussed (Sansoni 1998). Subjective measures such as these can be compared with the return to work data gathered routinely about workers' compensation patients by rehabilitation providers. There are strengths and weaknesses in both patient-centred and apparently more objective approaches to measuring health outcomes, and there is a clear need for continuing research in this area to achieve an effective national approach. Professional bodies such as the Royal Australasian College of Physicians and the

Australian College of Paediatrics (1996) are currently responsible for ensuring that doctors maintain their professional standards. Practitioners may indicate their commitment to this through annual self-reporting on participation in continuing education programs, or by undertaking a practice quality review.

Complaints, disputes and prosecutions

The Health Care Complaints Commission was established in 1993 under the New South Wales Health Care Complaints Act. It provides a major avenue for complaint resolution, which also generates data to assist risk management. The aims of the commission include facilitating the maintenance of standards of health services, promoting the rights of clients by providing mechanisms for resolution of complaints, and providing an independent mechanism for assessing whether disciplinary action should be taken against health practitioners who are registered under health registration acts. In 1996–97 the commission received 1551 new complaints, with 1253 of them being made against members of professions. Of these, 78% were against medical practitioners and 6% against nurses. Four hundred and fifty-four complaints were made against institutions, with 56% against public hospitals (Health Care Complaints Commission 1997).

Over 50% of all complaints were about clinical standards, including diagnoses, and treatment received, delayed or refused. Quality of care issues and complaints of fraud were also significant. One hundred and seventy complaints were referred for disciplinary and other action to registration boards. The commission is the complainant in all disciplinary inquiries, which are heard, if the person complained against is subject to professional registration, either by a registration board, a professional standards committee or a tribunal. A professional standards committee consists of three members, including two practitioners and a lay person. A tribunal consists of four members and is chaired by a district court judge or legal practitioner, in addition to the groups represented on a professional standards committee. Eight patient support officers were recently appointed in the Sydney metropolitan and Hunter regions to assist people to resolve problems they encounter with health services at the local level.

People who make health care complaints are self-selected and therefore provide a flawed data source. However, the commission is an independent body which investigates complaints and may prosecute on the basis of the evidence. In this respect its role has similarities with that of the WorkCover inspectorate and contrasts with the common law system where a consumer properly relies upon their legal advocate for support, not objectivity. In regard to the latter arena, the Review of Professional Indemnity Arrangements for Health Care Professionals

(1992) found that few people who made initial complaints of injury were compensated, and that of the claims actually pursued, approximately 60% failed. Of the successful claims, approximately 59 cents in the dollar went to the injured claimant, after delays of many years, with the rest being paid in legal costs.

In some workers' compensation systems access to common law has ended, or is limited to the seriously injured, who must choose this course in lieu of receiving statutory benefits. Between 1974 and 1989, nine major Australian government inquiries found that the adversarial system interfered with the effective rehabilitation of injured workers (New South Wales WorkCover Review Committee 1989). This view has recently been supported by the Industry Commission (1994) and also in regard to the New South Wales motor accident scheme (Standing Committee on Law and Justice 1996b). However, the Law Reform Committee of the Parliament of Victoria (1997) recommended that the Australian common law standard of reasonable care in medical negligence cases is appropriate and should not be replaced by a statutory standard other than in limited recommended ways. This view deserves further consideration because of the negative effects of the traditional adversarial system on rehabilitation, the need for national standards in health-related matters, and the difficulties of obtaining reliable data in an adversarial context.

Professional indemnity requirements are currently very different from those of insurance related to workers' compensation. Medical defence organisations provide services to their members which may include legal costs for civil liability and disciplinary proceedings, advice on medico-legal matters, and assistance with hospital and employment disputes. There are no requirements for such organisations to adopt the accounting, prudential and reporting requirements to which insurance companies are subject. All such organisations retain an exclusive discretion whether they will indemnify the negligent acts of a member and, if so, for how much.

The review of professional indemnity arrangements (1995) concluded that professional indemnity cover should be required for all health care providers, not merely those who are registered, and that the cover should be compulsory rather than discretionary and fully funded from premiums covered for this purpose, without any cross-subsidy. This position was supported by the Law Reform Committee of the Parliament of Victoria (1997) and is consistent with the approach taken to workers' compensation. Self-employed subcontractors are not currently required to have workers' compensation coverage but under the New South Wales Workers' Compensation Act a range of people whose employment status may otherwise be unclear are 'deemed workers' and are subject to coverage by their employers.

The New South Wales Professional Standards Act (1994) might assist the provision of an effective health risk management focus in a manner similar to that provided by the New South Wales WorkCover system in regard to occupational health and safety and workers' compensation. The Act enables the creation of schemes to limit the civil liability of professions, to facilitate the improvement of their occupational standards, and to protect the consumers of services provided to such people. The legislation also establishes a Professional Standards Council to supervise the preparation and application of schemes and to assist in the improvement of occupational standards and protection of consumers.

Conclusion

Health Ministers should insert requirements and incentives for risk management in government health care agreements and related contracts. Supporting contractual requirements should be designed for health education, research and information technology development. A risk management approach depends upon transparent contracts, which require the effective and transparent collection of reliable outcome data. Government should be responsible for managing taxpayer-funded contracts, but an appropriate industry body, such as the NHMRC, should have a coordinating and advisory role related to this process. The most useful kinds of data gathering regarding health, treatment, consumer complaint, dispute and prosecution require further national consideration in the light of the need for appropriate outcome data which effectively drive continuous improvement in health and health care provision.

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