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PLANNING AND STRATEGIES FOR IMPROVING AUSTRALIAN REGIONAL HEALTH DEVELOPMENT, EDUCATION AND RESEARCH

Short Title: Planned, regional health, education and research

Abstract: Governments have been advised to promote economic equilibrium, health and equity by increasing competition in centrally planned or monopolistic economic sectors, and strengthening the position of communities in peripheral sectors. Quality management depends upon transparency, and requires separation of policy and administration with the former in the driver's seat and the latter proceeding in a spiral of steps composed of consultative planning, action and fact finding about the results. Regional partnerships are being developed in Australia to provide health and related community services which rely upon effective administration of funds designed to support health goals. Medicare and workers' compensation fund ownership and management models are likely to have broader application in this context. New Medicare initiatives promoting better care for disadvantaged groups appear consistent with the current policy direction. However mental health and disability problems may primarily require a holistic, community based rehabilitation approach to treatment rather than a medical one. Planned and flexible education is required to support coordinated regional development of related governance, health promotion and rehabilitation strategies. Reform of university management is also necessary to support legislated functions more effectively and to assist planning, management and identification of those initiatives which appear to meet community needs most effectively.

Key words: Australian health policy; quality management; risk management; community based rehabilitation

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A **planned approach to international development**

For economists with a human capital or dual market perspective, education and health are the basis of productivity. The latter group sees organisations, industries, nations and the international economy as having a central tendency towards being planned or monopolistic, and a comparatively competitive but impoverished economic periphery. There are primary and secondary labour markets related to dual development tendencies. Rural communities, subordinate cultural groups, migrants, youth, women and people with disabilities often occupy secondary labour market positions primarily because of their comparative lack of appropriate education and work opportunities (Averitt 1968; Doeringer and Piore 1971; Gordon 1972). Governments have been advised to bring dual economies into greater equilibrium by increasing competition in centrally planned or monopolistic sectors, and strengthening the position of communities in peripheral sectors (Galbraith 1973). This article discusses the regional development potential of health, education and research in this context, using the example of Australia.

Dual market economic perspectives are consistent with current international regulatory initiatives. The United Nations (UN) Declaration on Environment and Development (1992) stated that promoting human health should be the first development concern. The first meeting of the UN Commission on Sustainable Development reviewed consumption patterns and poverty. In 2000 the Commission began to focus on sustainable land management, agriculture, finance, economic growth, trade and investment. The president of the World Bank has lamented that traditional economic policies to address issues of growth have seldom been accompanied by an equal focus on governance for health, education and environment improvement (Stiglitz and Muet 1999).

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Those with a narrower economic focus, or who seek short-term profits, still appear to drive development outcomes. A broadly coordinated regional planning approach to health and education is necessary to promote standards which complement the increasing international focus on opening world markets.

Although mainstream economists (Stiglitz and Muet 1999; Sachs 2001) recognise the need for better world governance to manage public goods such as financial stability and environment protection, the World Health Organisation (WHO) has promoted the importance of a broadly coordinated approach to social administration since the Ottawa Charter in 1986. The Charter stated that the necessary supports for health include peace, shelter, food, income, a stable economic system, sustainable resources, social justice and equity. It called for development of public policy and reorientation of health services, as well as community action to support health goals. The WHO program of work aims to increase the span of healthy life for all people in such a way that the disparities between social groups are reduced. Such aims are consistent with the prescriptions of dual labour market economists like Galbraith (1973).

Achieving health and development goals requires structural change. Western systems based on the British model have traditionally valued separation of three principle governance powers. Elected politicians, government administrators, and the judiciary are ideally the central but independent pillars of governance in this model. In recent years transparency has become the critical new goal of international and national management. It is required by international trade agreements to which Australia is a signatory, such as the Uruguay Round of the General Agreement on Trade and Tariffs, and the Asia Pacific Economic Cooperation Agreement. In this governance model, the emphasis is on clear separation of policy and administration, with the

former in the driver's seat (Osborne and Gaebler 1993). This is necessary to achieve the transparency necessary for effective accountability and the identification of comparative service outcomes.

In such a model, independence is conceptualized as the responsibility to make informed decisions, which can withstand public interest based scrutiny. This emphasis on transparency is consistent with the economist's view that perfect information is necessary for perfect competition. Social administration may be envisaged as experimentation which should combine discovery and implementation in one process (Hart and Bond 1995). The general expectation of quality management is that activity should proceed in a spiral of steps composed of consultative planning, action and fact finding about the results (Johnson 1997). This iterative administration and related research process may also lead to amendment of the original regulatory or policy direction. Contemporary health planning, health promotion, workplace risk management, program budgeting and action research ideally reflect such requirements (Eagar, Garrett and Lin 2001; National Health and Medical Research Council (NHMRC) 1995; Standards Australia 1999; Wilenski 1986; Hart and Bond 1995).

Dispute resolution services have arisen in response to pursuit of the individual and public interest in fairness, the maintenance of community standards and social order. Assisting the resolution of complaints and disputes should therefore be managed as a social service, like health or education, which meets an individual and public demand. Improving social outcomes should be the goal of all such services, and dispute data gathering should support these service goals. Education and research should also support the general requirements of quality management. Related

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opportunities and problems for Australian implementation of coordinated health, education and sustainable development are addressed in this context.

Australian health management priorities

Australian health service developments reflect the internationally recognised need to promote planned approaches to encouraging service cooperation and competition which enhance the individual's quality of life and improve community standards. In 1983 the taxpayer funded Medicare system involving free hospital care, free or heavily subsidised general practitioner care, and subsidized pharmaceuticals was established for all Australians. In 1986 the Commonwealth Disability Services Act expanded community-based services for the aged and for people with disabilities. Work related rehabilitation requirements were also introduced in state workers' compensation acts to supplement injury prevention requirements of new occupational health and safety (OHS) acts. In 1988 the first national health promotion goals were established for cardiovascular disease, cancer, and injury. National programs to address mental health and the health of Aborigines were also initiated. Equitable access to services, and fostering participation of communities and individuals in decision making at all levels are also national health goals (Commonwealth Department of Human Services and Health 1994).

The health status of Australians measured as disability adjusted life expectancy is ranked second in the world, behind Japan (Leeder 2002). Nevertheless, between 1990 and 1998 the selfidentified disability rate climbed from 16% to 19% of the population. Musculo-skeletal problems

comprise a third of all health difficulties experienced by around 600,000 Australians receiving the Commonwealth disability pension (Minister for Family and Community Services 1999). Around one fifth of problems they experience are psychological or psychiatric. The likelihood of reporting disability rises with age and two thirds of those receiving a disability pension are between forty-five and sixty-five. People in rural areas are likely to have higher levels of disability, particularly if they are indigenous.

Australia has begun to establish regionally coordinated management of health and development. NSW area health managers have consultatively developed population profiles and plans with an emphasis on the needs of the aged, in partnership with their communities. An electronic health record is being constructed for every individual who accesses the national health care system. Priority health care programs are being set up for people with chronic and complex conditions (NSW Health 2000). Diagnostically related group funding systems are being developed to support hospital and some community based services (Eager and Hindle 1995). The requirement for service purchaser and provider splits is consistent with the view that policy and administration must be separated to identify comparative service outcomes. Medicare services now allow primary care providers such as general practitioners to focus on preventative care for older Australians and better coordinated care. These health assessments, multidisciplinary care plans and case conferences are designed to achieve a case management approach to the services provided, and a better match between the services and the needs of recipients (Royal Australian College of General Practitioners 2000).

These initiatives have now been supplemented by Commonwealth proposals to provide training places for more general practitioners. Incentives are proposed for doctors to locate in under

serviced rural areas and to bulk bill Medicare when providing free consultations to comparatively disadvantaged people, identified primarily by their status as Commonwealth concession card holders. The government estimates these payments would mean $1 extra for the doctor per concessional service in capital cities, up to $6.30 per concessional service in rural or remote areas. Funding is proposed to assist general practices upgrade their computer links with the Health Insurance Commission, and to enable up to eight hundred practices to receive assistance in employing a nurse or other allied health care worker. Participating doctors will need to agree to provide services at no cost to patients covered by a concession card (Commonwealth Department of Health and Ageing 2003). Critics argue that the proposals will encourage doctors to charge higher fees to non-concessional patients. The government denies this, and states that no proposals are compulsory. Doctors will choose whether to access offers and whether they will continue to bulk bill all clients, without additional gap payments required.

These proposals might help address the relationship between poverty and poor health which exists in Australia as well as internationally. However, a holistic approach to treatment and rehabilitation, rather than a medical one, is often likely to be required. Many Australian families, especially those who live in comparatively disadvantaged communities, may principally require more effective child care, education, recreation or related family and vocational support to improve their mental health and reduce disabilities. For example, the physical health of Australian youth has improved in recent decades, but mental health apparently has not. Two thirds of teenage deaths are injury related. Alcohol dependence and motor vehicle accidents remain the greatest problems, although the latter have been declining. The young, troubled, poor and Indigenous experience a comparatively high risk of accidental injury, depression, anxiety,

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self harm, victimization and imprisonment (Australian Institute of Health and Welfare 2000; Australian Bureau of Statistics 1997, 2001; Standing Committee on Law and Justice 2000).

In 1996 the World Health Assembly established violence prevention as a health priority. Australia now addresses interpersonal violence within the national injury prevention program (McDonald 2000). In NSW the Attorney General provides local councils with funding for crime prevention programs which are planned and implemented with communities. NSW housing policy attempts to provide subsidized housing in a manner which promotes socio-economic mix as a crime prevention and employment strategy. Debate continues about how best to develop more effectively coordinated management approaches which can improve individual and community health. The introduction in NSW of the Victims Compensation Act and the Young Offenders Act provide potential for studying the comparative effects of court diversionary practices and jail. Coordinated mental health and crime prevention strategies which focus on environment management, and on child care, education, recreation, employment and related mentoring for high risk individuals and communities are required. Planning and implementing these strategies might be undertaken through community partnerships between general practitioners, universities, elected government representatives, child care centres, schools, police, Centrelink offices, or through programs such as NSW Families First which provides support to parents. Students and others are likely to benefit from planned, community based education and service which supplement their theoretical learning.

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Towards national structures for better regional fund management

In 1989 Australian States began to review and update legislation. The Council of Australian Governments (COAG) agreed to mutual recognition of State laws, and began developing national standards for health and the environment, related occupations and training, social security benefits, and labour market programs (Premiers and Chief Ministers 1991). The governance ideal has been to create a platform of national standards through the inquiry based identification of good practices. The Competition Policy Reform Act (1995) ideally promotes competition on a level playing field of minimum standards related to health and environment protection. Equal competition between private and public sector service providers is required unless another course of action is demonstrably in the public interest (Fels 1996). Although separation of policy and administration is recognised as necessary to judge the comparative outcomes of competing service provision, state freedom of information legislation currently relates only to the public sector, and medico-legal information is exempt. This inhibits alternative dispute resolution.

Health care practitioners are increasingly encouraged to use evidence based approaches to treatment. These should not depend upon slavish application of received standards regardless of apparent particular needs. Risk management requirements of state OHS acts and professional independence are consistent. Decision makers should deviate from the relevant approved or expert recommended practice if there is good evidence that other action is likely to be safer in the specific situation under consideration. The deviation and its justification should be recorded. Large groups of relevant documented decisions and outcomes are studied. This comparative risk management and research practice ideally leads to increasingly informed evaluation of practice in

all settings, and to the general development of more informed standard setting and practices (Johnson 1997).

Duckett (1997) found that on social indicators related to access, equity and cost, the Australian Medicare system outperforms U.S. health care, which is primarily funded through employment related or family health insurance. Medicare pricing requirements put downward pressure on all private provider prices. Critics of Australian competition policy and increased government contracting (Hancock 1999; Smyth and Cass 1998) ignore the relationship these initiatives may bear to national and state regulatory processes which have progressively extended government and industry ownership of major health, workers' compensation insurance and superannuation funds over the past fifteen years. Funds are increasingly managed competitively by the private sector, according to requirements established by government in the public interest. Premium holders and those injured are the primary stakeholders in this fund management model (Heads of Workers' Compensation Authorities 1997). Such insurance schemes may be designed to extend public and industry ownership and control over funds which were formerly owned privately and commercially driven, supposedly in the interests of shareholders.

Russian and Chinese experiences suggest that stable management and competition are more important than private property for effective functioning of the market (Stiglitz and Muet 1999). The Australian insurance experience clearly shows that private sector underwriting and competition on premium price inhibits effective injury prevention, rehabilitation and fund management (NSW WorkCover Review Committee 1989; House of Representatives Standing Committee on Transport, Communications and Infrastructure 1992; Review of Professional

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Indemnity Arrangements for Health Care Professionals 1995; Australian Health Ministers Advisory Council 1996; Standing Committee on Law and Justice 1997; Industry Commission, 1997; The HIH Royal Commission 2003).

Private sector insurance practice is not transparent, and premium price competition promotes economic instability. Private underwriters require high profit margins to guard against the effects of poor investment and administration practices, competitive premium price cutting, global economic downturn, unexpected major court awards and increasing long tail claims, which lead to insurer insolvencies. When competing insurers underwrite and own the premium pool, they must not only have high profit margins to guard against insolvency, but also require costly reinsurance. On the other hand, when premiums and benefit requirements are clearly established by legislation and funds are owned by the public and industry, insurers contracted to manage the business may be encouraged to compete for market share by providing premium holders with risk management services rather than by premium price cutting. The comparative outcomes of service provider activity can be more effectively evaluated in this model, and benefits of fund investment are returned to scheme stakeholders rather than to shareholders of the insurance company.

Regional implementation of national health goals should assist development of coordinated, consultative, flexible and effective approaches to all service provision and related fund management. Kendig and Duckett (2002) have proposed that all Commonwealth and State funds for aged care services be pooled into a single regionally managed fund. They recommend that housing and aged care should be funded separately, with streams for accommodation on one hand, and for living costs and care needs on the other. Care provision based on identified personal needs should apply the current resident classification system for the elderly, irrespective

of whether services are provided in residential care or the home. A similar approach should be investigated in related service areas. Medicare and workers' compensation insurance may provide useful models for broader application (O'Donnell 2003).

Education and research to support regional development goals

The NSW disability policy framework (1998) requires a coordinated, planned and flexible approach to policy and service provision for people with disabilities and their carers. Service providers must measure and report on progress. The UN defines community-based rehabilitation (CBR) as a strategy within community development for the rehabilitation, equalization of opportunities and social integration of all people with disabilities. This should be implemented through the combined efforts of disabled people, their families and communities, and the appropriate health, education, vocational and social services. 'Community' may mean people with common interests who interact on a regular basis, or a geographical, social or government administrative unit. This perspective provides a micro and macro approach to assist regional program management in Australia. The UN CBR statement stresses that improving the capacity and skills for community involvement is important and must be coordinated to ensure optimum use of resources. CBR workers should be trained to provide client support and flexible service management to meet regional needs which are consultatively identified, prioritized and funded.

Because of their legislated functions, holistic range of expertise and independence, Australian universities potentially appear to be appropriate leaders of planned education and research programs necessary to support effective regional development. All but two of thirty-nine

universities are established under State legislation which requires they have education, research, community service and certification as their major functions. However, the review of higher education financing and policy (1997) noted universities must address the ramifications of a view of the world based on collegial decision making. A Senate references committee (2001) noted the limitations imposed on effective development by collegiate governance structures, and the need to identify alternate funding models that would better serve the needs of regional and disadvantaged students. A ministerial discussion paper (2002) quoted the views of independent auditors that the current state of cost management in most universities is not adequate to support the needs of their businesses and the changing landscape. Under-utilization of opportunities for continuing education has also been identified (Gallagher 2000).

The National Health and Medical Research Council (NHMRC 1999) stated it is difficult to find an agreed definition of research. However, the Health and Medical Research Strategic Review (1997) thought that Australia should develop a focus on the prioritized creation and assessment of interventions and policy. Adopting definitions from the WHO the report stated the national research effort should take three forms. Fundamental research should generate knowledge about problems of scientific significance. Strategic research should generate knowledge about specific health needs and problems. Research for development and evaluation should create and assess products, interventions and instruments of policy that seek to improve on existing options.

This approach appears consistent with requirements of effective regional management, and also with the Boyer (1990) model of scholarship. This seeks to integrate teaching and research activities, and distinguishes between four forms of scholarship. Discovery creates new knowledge. Integration puts it in an intellectual context. Application applies it in useful ways for

individuals, industry and institutions. Teaching facilitates student learning and developing scholars in all these areas. Consistent with these perspectives, Australian university education content, delivery and assessments should be consultatively designed to assist identification, prioritization and control of health risks at work and in communities in order to promote health and development. This should also lead to the prioritization and development of related strategic research. Such an education and research model would assist governments, industry and communities to implement regional, national and international goals and standards from in a constructive, critical and comparatively objective manner.

The National Expert Advisory Group on Safety and Quality in Australian Health Care (1999) recommended that health ministers lead the way in promoting a safety and quality enhancement ethos throughout the health system. University education and research should support this focus. From a public interest perspective, expenditure by professional and academic cultures currently lacks justification. The absence of a legislated duty of care for professionals exacerbates the problem that there is often no systematic approach to the collection of data about injuries, and no linkages between the compensation system, quality assurance processes, and programs or practices aimed at injury prevention. A consistent risk management approach should be taken, where appropriate, to the duties of care and disclosure required of employers, practitioners and researchers towards workers, clients and communities.

A legislated duty of care and duty to inform would reduce pressures on researchers to be secretive or to bend their findings to suit political, commercial or other sectional forces. It would facilitate comparison of research outcomes and promote recognition of the need for public funding to be clearly used in the public interest. However, governments currently appear unprepared to address

community needs for transparency which may come into conflict with the protection of intellectual property or with related commercial, political or legal interests as they are currently pursued. On the other hand, at a conference organized by the Medical Foundation and the College of Health Sciences of Sydney University in 2002 'commercialization' was defined by the Sydney University Business Liaison Office as 'the process of transferring research outcomes to the community in a manner which optimises the chances of their successful implementation, encourages their use, accelerates their introduction and shares the benefits among the contributing parties'. This definition integrates commercial, collegiate and government management and funding objectives more effectively in the public interest. Although it currently has no legislative or contractual backing, any organization which utilizes significant amounts of public funding might appropriately adopt it.

Conclusion

Economists draw attention to the tendency for dual market development. International and Australian policies recognise the related need to promote greater competition in centrally planned or monopolistic sectors of the economy, and to provide greater support for planned development in comparatively disadvantaged economic peripheries. A broadly coordinated and transparent approach to regional health, education and research development is necessary. NSW area health services have begun consultatively planning this. Medicare initiatives which are potentially supportive of this planning direction have also been introduced. However many mental health and disability related problems often require broadly conceived, community based rehabilitation strategies rather than a medical model of treatment. Recent proposals that all funds for aged care services should be regionally pooled may be relevant in other areas of service provision.

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Medicare and workers' compensation should also provide useful insurance models for consideration in this context. Planned and flexible education is required to support coordinated regional development. Reform of universities is also necessary to assist transparent and effective community health planning and management.

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Strategic investment in health and medical research can serve to minimise the upward pressure on costs associated with new treatments, an ageing population and the increasing burden and complexity of disease. For example, clinical trials can lead to considerable additional health and economic gains when trial-based evidence is put into practice.Â From this work, Professor Mickanâ€™s team co-designed the STRETCH (STrategies for Research EngagemenT of Clinicians in allied Health) protocol, published in BMJ Open3.Â The Pharmacy Research Collaborative meets monthly to discuss and plan research across pharmacy within Gold Coast Health. The group strongly supports developing clinical pharmacists to undertake quality use of medicines projects.