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Sustainable Population Health: A Pressing Priority for Community Wellbeing

Peter Harvey

Spencer Gulf Rural Health School, Whyalla Campus, University of South Australia

Recent developments in primary health care, preventive care, early intervention programs, population health constructs and coordinated care trials in Australia have explored the idea of changing our emphasis in health care from responsive acute care to more integrated, whole population community wellbeing management. This idea accepts that much illness and even trauma experienced by individuals in our communities can be prevented, mitigated or managed in a more constructive and positive manner than has previously been the case. Much disabling illness need not occur at all and can be avoided through better community-based management models, education programs, and lifestyle changes that contribute to more healthy communities. As in the wider business world, we are becoming more cognisant of the fact that prevention is not only an appealing idea in terms of health outcomes and quality of life, but that it is good for business also. It can moderate demand for costly health care, assist consumers to understand how to live healthier and fulfilling lives and overall help to sustain a much more dynamic community. This article, based on work in a rural health service in South Australia, points to some elements of sustainable primary care that appear to have potential to take us where we need to go. It asks whether we have the capacity and the will to make the necessary investment in sustainability to ensure our future or whether we are to remain bound in a reactionary model of health care rather than considering the impact of wider social and physical environments as part of the overall community health equation.

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mineral industry in Australia. Flannery observes that:

Until the early 1980s agricultural products were the single most important income earners for Australia. Since then, a rapid growth in mineral exports has superseded agriculture, so that today mining earns Australia more than 29 billion dollars, while agriculture earns only 16 billion dollars. All other export earnings (including all manufacturing) earns around 11 billion dollars (Flannery 1994, p. 372).

The reduced capital being generated for rural community use will inevitably mean that the distribution of wealth, in the form of cash and social services as well, will be affected. In such situations, those who lack economic security and power will have access to lower standard services and support structures. Rural communities have already experienced a significant change in population demographics and the current rural recession can only serve to continue this trend. Although some growth is occurring in allied primary industries, in tourism and aquaculture, the Eyre Region in South Australia, for example, is still dependent upon agriculture to a large extent and profit margins in this production are constantly under pressure reducing individual family income and affecting overall community wealth (Harvey 1996).

Others have recognised the link between the sustainable environment view and sustainable health (Brown 1992, 1998; Terris 1999) and the need for different countries to manage their contributions to health care differently in the future in order to develop a sustainable and healthy environment (Moynihan 1998). Such a sustainable environment is increasingly becoming a prerequisite for individual health as we enter a new era in preventive primary health care in which the state of the environment will become a major determinant of disease management and wellbeing. However, we are still not, as a nation, recognising the importance of wellbeing in the general equation of economic activity. As Heilbroner notes, the inexorable demands of economic productivity tend to impact adversely upon the health and wellbeing of those populations it encounters:

Populations are pressed into new occupations without heed for the effect on their health, economic security, or opportunities for development, but again solely to serve the requirements of expansive capital. Governments are cajoled and pressured to adopt policies, both with respect to ‘home’ and ‘host’ nations, that facilitate the process of internationalisation of capital, justified not by any broad consideration of human requirements around the globe, but according to a calculus of ‘economic efficiency’ that is measured almost exclusively by the touchstone of profitability (Heilbroner 1998, p. 134).

Brown suggested that our current generation could actually be the healthiest generation of any human population, past or future, as the impact of our polluted and poisoned environment begins to define the health and wellbeing of our communities:

It could be suggested that the present European population may be the healthiest the human species will ever know, with a life expectancy of over 80 years sandwiched between the defeat of infectious and lifestyle diseases, and the risk of projected environmental hazards (Brown 1992, p. 225).

The idea that the notion of constantly expanding economies and good health are mutually compatible and able to co-exist is seen as an impossible dream towards which our health care system should no longer strive. The principle of sustainability in an economic and environmental sense (Suzuki & Dressel 1999) can be applied equally well to a new way of shaping our ideology of health care and building a preventive approach to community wellbeing (Brown 1992).

As part of the sustainable health argument, Callahan cites Illich who argued a similar case for de-schooling society in the seventies (Callahan 1998). The argument suggests that our health system, like education, has become institutionalised and
no longer serves the needs of communities; it is no longer responsive to the values and aspirations of people and it alienates individuals from control of their own consciousness and their own values (Illich 1971). Once schooling or health systems are controlled by institutions, the power of the individual to determine their existence within these structures is lost and with this loss comes other ills such as stigmas associated with being more or less successful within a particular regime.

Illich has written of the “medicalization” of our health system (Illich 1971, p. 32), and Edwards now calls for an “Illich Collaboration”, somewhat like the Cochrane Collaboration, to make readily available information on the relative harms of medical care and to examine the phenomenon of increased consumption of medical services as societies become wealthier (Edwards 1999, p. 58).

Illich concluded that:

If doctors were differently organised, if patients were better educated by them, for them and with them, if the hospital system were better planned, the accidents which now result from contact between people and the medical system could be reduced (Illich 1971, p. 39).

Callahan concurs:

Carlson and Illich espouse a de-professionalisation and deregulation of medicine to induce people to be more responsible for their own health and to be free to pursue that health as they saw fit (Callahan 1998, p. 18).

Essentially, this argument reduces to the same premise being implied through the coordinated care approach in Australia. This requires a re-thinking of social and health priorities to allow communities to invest resources in primary social support structures by moving or substituting them from the costly and generally excessive acute end of the health system:

It also seems clear now that if health promotion and disease prevention, at present much championed, are ever to achieve parity with acute-care medicine, we must be prepared to rethink today’s medical priorities to make the potential gains in health status efficacious. More generally, a serious transformation will require taking money away from the acute-care sector, including research into the cure of many lethal diseases, and using it instead for prevention research and massive educational efforts designed to change health-related behaviour (Callahan 1998, p. 19).

To complicate this argument, there is also a strong movement in our community today towards an economically rational view of capital and of service provision. This translates into the view that health care, like education and other public sector commodities, has become a “marketable good” and that this view “has come to prevail over the view that health care is a public good” (Lee & Paxman 1997, p. 2). At the same time the World Health Organization (WHO) defines health as “a state of complete physical, mental and social well being and not merely the absence of disease or infirmity”. However, everything is currently seen in financial terms and systems are planned that way. Outcomes are measured against a certain cost structure and in this cost structure only certain elements are considered. So how are we realistically to attain the vision of a well society when we are not really considering all of the elements that contribute to such a state?

In the farming industry, for example, there is no real costing of environmental degradation, poison build up or occupational health and safety in the production costs of the food farmers produce (Callahan 1998). The same premise exists in the fishing industry. There is no attempt to value the maintenance of nature’s capital base (Baum 1998, p. 249) in the process of farming and harvesting. Indeed if we did so we would have a very different set of economic growth figures to contend with (Suzuki & Dressel 1999, p. 214). Callahan also notes that:

…the environmental movement has tried to alert us to the fundamental tension between the ideas of constant economic growth and ever improved standards of living, and the preservation of a healthy environment (Callahan 1998, p. 34).
And Brown also suggests:

Intervention in the physical and social environment, before and not after the damage is done, has always been a characteristic of successful health promotion. The range of interventions on behalf of either health or environment highlights the high cost of failing to act before the event (Brown 1992, p. 223).

**Sustainable Economy**

Our current model of economic growth is based on a “gift” of natural resources that is finite and diminishing rapidly. The belief that it is all there for us to harvest as efficiently as we are able and at no ultimate cost to us is short sighted. Through initiatives in primary health and our developing understanding of social health concepts, communities are becoming more aware of the long-term impact of the way we interact with our environment and how this ultimately affects our wealth and our health.

The model of sustainable systems or “steady state” economics and funding is as applicable to health care provision as it is to environmental wellbeing and sustainable primary production processes. It appears that there are some lessons we can learn from the sustainable environment arguments that can be applied to the struggle to evolve a sustainable health system.

Sax is also concerned with the sustainable environment argument and the impact of this thinking upon prospective health and wellbeing. He observes:

The human rights framework may well provide useful guidance in responding to current public health challenges. The framework may also direct our attention to the warnings that growing world populations and expanding economies may be putting at risk the natural stocks and resources that sustain us, such as safe fresh water and fertile soil. Atmospheric ozone depletion and the greenhouse problem could lead to changes in global climate with serious consequences for health in coming decades (Sax 1998, p. 15).

In the health industry we are yet to quantify the long-term health costs of lengthy exposure to chemicals and sprays (Suzuki & Dressel 1999). Also, the real impact on health and wellbeing of remote living, unbalanced and excessive diets, of psychological and emotional pressures (Marmot 1998), of failing businesses and lives in rural communities or of maintaining healthy, natural Aboriginal communities, has yet to be determined. Alarmingly, rural males, for example, have adopted life styles and work practices that are essentially inimical to their wellbeing. They have become a high-risk group with up to three times the death rates from lung cancer, driving accidents and suicide as women in the same age groups (O’Hehir 1996).

O’Hehir writes that:

…rural males are drinking, driving, smoking and working themselves to death in the belief that the hard life is actually healthy (O’Hehir 1996, p. 5).

And that:

Men’s ill health is not purely physical. It is psychological, sociological and physical and as such, much of our lifestyle and learning behaviours, particularly in relationships with females, need to be relearned (O’Hehir 1996, p. 15).

Current measurement of trends in community illness are still looking at health in terms of the number of people who get sick, how long they need to be treated and how much time they take up in the hospital system. This is the current health paradigm (Keleher 1999), which takes little cognisance of whole community health or the value of maintaining clean water or chemical-free food supplies. Consequently little of the available health budget is spent on ensuring people do not get sick because most of it, and more, needs to be spent on those who are already sick. We cannot get far enough ahead of spiralling demand to begin effectively to prevent breast cancer or prostate cancer or stomach cancer, because we cannot afford to develop the living and working practices that will prevent exposure to the dangers and life practices that cause these problems. The coordinated care trials...
offered the prospect of quantifying data around illness prevention and testing ways of putting improved primary health systems in place to reduce the incidence of crisis arising from chronic illness and this work has led to other innovative approaches, especially in rural communities (Harvey 2000, 2001).

Clearly, if people live healthy, stress-free lives they will live longer, but they will eventually get sick and possibly need medical intervention from doctors and the acute health system. Social programs can only mitigate the physical limitations of the organism it is serving to a limited degree and no doubt, as people do live longer, they will develop illnesses that demand even more specialised treatment. Preventive programs may simply shift the cost of care forward in time (Burton et al. 1995; Fries 1993; Weinberger et al. 1996). The point is, however, that the quality of people’s lives can be improved by providing more primary health intervention, education and healthy lifestyle advice to communities:

The evidence is now overwhelming that, with a decent environment and sensible health habits, most (but not all) people can live long and healthy lives without much help from medicine (Callahan 1998, p. 173).

Haggerty makes a similar point in his discussion of social and environmental contributions to ill health and the future of universal access to health care in the United States:

Our new surgeon general has articulated that the most prevalent and destructive disorders among young people today are violence, injuries, homicides, suicides, drug abuse, new infections such as human immunodeficiency virus, chronic disease and resistant tuberculosis. Behind all of these problems lies social disadvantage, which includes poverty, racism, social isolation, stresses of living, poor housing, and, perhaps most important of all, lack of meaningful jobs. The health professions alone cannot solve these problems, but we can demonstrate their relation to the profoundly destructive health problems of children and join as partners with others to create advocacy for a more equitable society and, in the process, reduce these destructive disorders (Haggerty 1998, p. 774).

No one will live forever, but they could enjoy a much better quality of life if the disease agents and the destructive influences over their lives are removed from or limited within the environments where people live (Lee & Paxman 1997).

No doubt our ageing population will produce different and greater demands on our social security and medical systems. By the year 2031, there will be an estimated 21% (5.1 million people) of the population of Australia over the age of 65 (Australian National Report on Population (ANRP) 1994, p. 20) compared to only 11% of our existing population. In rural communities, the percentage of aged people may be even higher in relation to the total population as many young people are forced to the cities to find work, leaving their ageing parents to retire in small country centres. These trends will also swell the ranks of the aged in other rural communities and these people will need support at home or in institutions such as nursing homes and aged care facilities.

With 9.3% of all aged people over 70 years currently in residential care (ANRP 1994), we can expect the figure to grow considerably in the future. As people live longer and families can no longer provide the total support that aged people with increasingly complex needs will demand, our health systems will come under additional pressure to improve efficiencies and spend limited resources more effectively (Fries 1998, 2000).

The Department of Veterans’ Affairs (DVA) estimates that currently there are around 342,000 entitled veterans and their dependents seeking assistance with an average age of 71 years. About 37% are over 75 years and 5% over 85 years. By the year 2000, this figure will almost double to 68% of the treatment population greater than 75 years. Also, there will be an estimated 190,000 veterans suffering from some form of dementia by the year 2004 (Fries 1998, 2000; Medza 1995).
Such trends have particular relevance for rural regions. Health services will need to gear up for large populations (relatively) of aged and dependent people, and if O’Hear is to be believed, populations in the upper years will continue to contain a disproportionate number of women. The UN report also identifies this trend and notes that, “In June 1992, the sex ratio for the age group 65 years and over was 76 males per 100 females” (ANRP 1994, p. 21). Clearly, women are going to be living longer than men in the future and may therefore have increasingly complex health needs as they do so.

Future Options

So, what can we expect to see in terms of health care delivery in our culture? Can we expect any change in funding priorities or policy directions or is the picture one of having to continue to do more with less? DVA, for example, recognises that community based care for aged people suffering from dementia in particular is a realistic option, but more funding will need to be provided to support such initiatives (Fries 1998, 2000; Medza 1995). Undoubtedly, more funding will be required to meet the health needs of the ageing population, but coordination and integration of existing services to gain added health efficiencies and improved outcomes will also be an important consideration.

In the developing world, many of the archaic practices that wealthier nations can afford to export to poorer countries still exist and are proliferating. The standard of a country’s social system is determined by the standard of that country’s balance of payments and as Australia’s situation is not good, we are hardly likely to see sudden developments in an enlightened social health, welfare and education model given our existing and growing international burdens.

This reality could mean that large-scale pro-active programs may not be adequately planned for or funded and that health care in particular will remain a reactionary process dealing as best it can with problems (some of which could be avoided by better education and information practices) as they arise. In this scenario, many of the lifestyle and environmental issues that contribute to disease and finally to the need for medical intervention could remain unrecognised. The social conditions of people’s lives have direct and powerful impacts on health and on the potential for people to manage issues or problems that may arise. People in some communities are better placed to deal with general health issues, and social problems, than are people in other communities.

Some of the current developments in our social and political reality to be considered in this wider perspective are:

- Due to recent events in the history of the state, funding constraints have been placed on all public sector operations. Government is looking to be more cost-efficient and to save money where previous projected costs may even have required real increases in funding in order to meet need.

- Where possible, services are being combined or run in conjunction with other support groups to limit duplication of services and reduce the cost of maintaining public sector infrastructure.

- In rural areas the proportion of older people is increasing and the number of active young people in the communities is decreasing. The services in rural communities are therefore being aimed more at the needs of elderly people and aged care than at the needs of younger people.

- Psychological services are in demand as the pressures of work or the pressures of not having work and the changing nature of the rural
economy take a toll on people at all levels of the community.

- Social services are being reduced across the board as the need for support, counselling and crisis care for families, young people, the aged, single women, Aboriginal people and the unemployed is increasing. A UN report notes that: “The levels of care and services available to older Aboriginal and Torres Straight Islander peoples, particularly in rural and remote areas, is considerably lower than that available to the wider Australian community” (ANRP 1994, p. 68).

- There is a common perception in government (and in the developing new society) that private organisations are able to provide more efficient and cost-effective services to communities. Government instrumentalities are being dismantled in preparation for a “user pays” culture. The social security safety net is there for those who are unable to pay, but the intention is to reduce the number of recipients of free or government funded care and support in all areas.

Against this background of changing and emerging needs in the Eyre Region, the SA HealthPlus coordinated care trial offered an opportunity to demonstrate the efficacy of early intervention, better service coordination and improved data networking around individual patient needs. The SA HealthPlus model established several new elements in the management of care for patients with chronic illness (care plans, service coordination, schedules of services, alternative service purchasing arrangements, data integration, service utilisation tracking, preventive education, and rehabilitation programs).

This Trial provided a strategy for dealing with many of the issues outlined in the earlier community needs assessment carried out there. It set out to change the way health was perceived within the community by medical staff, by patients and by carers. Beyond this, the SA HealthPlus coordinated care process was designed to move health service management into a new era of outcome funding in which the concept of early intervention and funding of relevant preventative services was fundamental to improving overall community health and wellbeing. Through the SA HealthPlus experiment, health services were able to evolve a model of care based on demonstrated need and supported by relevant integrated data on clinical conditions as well as social and emotional need.

Patients, through the care planning process and the problems and goals strategy (Battersby et al. 2001) were encouraged to articulate their health problems in terms of social and emotional factors as well as clinical factors. The impact of this process was that the GP, the patient and their service coordinator formed a more empowered and informed team looking at health and wellbeing in a much more holistic way than was the case previously. This process created the possibility of GPs working as care coordinators funded to manage patients to stay well instead of only having time to treat them when they became ill.

The essential vision for the Region was the creation of a sustainable model of rural health care based on early intervention and prevention to achieve defined outcomes for the whole population. This goal can be characterised by the following elements outlined by Callahan in his recent discussion of modern health care systems:

...the scientific view that the key to population health lies in the background educational, social, economic and environmental features of society and in the successful deployment of effective health promotion and disease prevention programs; (2) the social ideal, which understands the struggle against disease, accident, and illness
as a matter of solidarity, requiring common effort (for all are mortal) and common sacrifice (for not all needs and desires can necessarily be satisfied) and aiming for a common, collective good health; (3) the economic conviction that only a steady state, economically sustainable medicine oriented to population health ought to be politically acceptable in the future; and (4) the moral ideal of a recognition by individuals that their personal behaviour will significantly determine their life-time health prospects and that they have a social obligation to take care of themselves for their own sake as well as that of their neighbor” (Callahan 1998, p. 170).

Conclusion
Health care, like other wider economic systems, is becoming increasingly concerned with sustainability, prevention, early intervention and long-term management of wellbeing. This implies a need to move the health care agenda beyond a reactionary, crisis based acute care model to a more fully integrated preventive care model based on the recognition that “health” is a function of numerous social and environmental variables.

As part of this vision, as described above, it is becoming more obvious to investors in production generally that the short-term focus on maximising profits without regard to wider environmental factors is increasingly becoming bad business. The health sector is no different. Unless health professionals become more involved in community care, education, prevention, self-management and consumer empowerment processes, the health system will collapse in the future under the weight of acute care needs. Much of what manifests today as illness (diabetes, cardiovascular disease, respiratory disease), and which is burdening our health systems, is essentially preventable and if not totally preventable it is manageable.

By taking this wider view of health and wellbeing it will be possible to invest our finite resources more effectively to optimise the benefits of those resources to the whole community. This concept implies recognition of key elements of a healthy society upon which healthy individuals are predicated:

- broad based education and consumer participation in society
- the role and impact of work in wellbeing
- the idea of healthy sustainable environments, both natural and social
- the major role of lifestyle choice on individual and community wellbeing
- implementation of early intervention and prevention programs more extensively rather than expansion of endpoint interventions
- the idea of quality of life as opposed to quantity of life and the need to optimise quality years or life lived through broader approaches to wellbeing

This transition to sustainable approaches to health will be gradual, as it is in the wider business world, but we are increasingly becoming cognisant of the importance of a longer-term view of how we live and work and how we are essentially the result of major environmental determinants. Health in future will therefore depend more on how we treat and manage these determinants and not so much upon how we treat individual patients whose life and wellbeing is the consequence of larger factors and ultimately omnipotent factors that determine our lives.

References


Correspondence to:
Peter Harvey
Spencer Gulf Rural Health School
Whyalla Campus
University of South Australia
Nicolson Avenue
Whyalla Norrie, South Australia, 5608
A U S T R A L I A
Email: Peter.Harvey@unisa.edu.au