The CHESS Principles for Healthy Environments: An holistic and strategic game-plan for inter-sectoral policy and action

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Abstract

There is a rapidly growing body of evidence which demonstrates that the built environment is one of a range of important variables that influences people's physical activity levels, social interaction and consequent health. The creation of supportive environments for physical activity and social connectivity provides urban planners and health professionals with the opportunity to be proactive in helping to address the wellbeing of local communities

In this paper we present our CHESS principles for healthy environments. This is a comprehensive schema which enables professionals to work inter-sectorally and collaborative to strategically devise policy and subsequent actions for wellbeing. Simply stated as different 'environments' which underpin the achievement of healthy people, places and planet, CHESS encompasses the following:
  ➢ Connected Environments
  ➢ Healthy Eating Environments
  ➢ Safe Environments
  ➢ Sustainable Environments.
'Connected environments' is arguably the most important principle as it relates to the environments that need to be designed and connected for health, *as well as* the interdisciplinary environments *in* which urban planners and health professionals work. Both need to be *connected* in different ways in order to achieve healthy eating, safe and sustainable environments supportive of community and individual wellbeing.

The paper also provides an overview of key resources for implementing CHESS, with particular emphasis on PCAL. As well, some of the challenges currently facing the achievement of healthy environments are canvassed. The paper concludes with a wealth of practical and implementable suggestions for taking the CHESS principles forward immediately and in the longer term.

Setting the Scene – Connecting Planning and Health

There is global concern about rising rates of serious physical and psychological conditions—such as cancer, heart disease, diabetes, asthma and depression—in urban populations. Many of these non-communicable diseases (NCDs) are exacerbated by obesity and low levels of physical activity. They have reached epidemic proportions affecting "...people of all ages, nationalities and classes" (Daar, et al 2007, p. 494). For the first time in human history life expectancy is likely to decrease largely due to the epidemic of NCDs.

Poor eating habits – particularly the over consumption of fats and sugar and insufficient intake of fresh vegetables and fruit (Begg et al, 2007, pp. 81-83; p. 87) – further compound the problem. Medical interventions are limited in tackling such conditions because they are related to a variety of complex factors (Dixon and Broom, 2007). It has been suggested that such multifaceted problems necessitate "...action in many areas. Preventing obesity... means making changes in the transport, urban planning, agriculture, education and health sectors, for starters" (Sweet, 2007, p. 16). City living is seen as an increasing impediment to healthy living. Now that we have globally, for the first time ever, more people residing in cities than in rural areas (United Nations Estimates in Capon, 2007, p. 658), the implications for health budgets and productivity losses due to illness and disability are of great concern for governments.

Sprawling suburban environments, such as we have in Australia, with their characteristic low residential densities, car dependency and separation of home and work, are being linked to behaviour patterns that contribute to poor physical and mental health (Thompson, 2007; Mead et al, 2006; Frumkin et al, 2004; Frank & Engelke, 2001; Barton & Tsourou, 2000). In many suburban localities shops are a long way from houses so it is difficult to get there other than by car. Indeed, many large shopping centres are designed with the car user in mind and are very unfriendly to pedestrians. Increasingly, children do not walk to school or play games outdoors. The single family dwelling can be an isolating residential form, particularly for the elderly and disabled. People who must travel vast distances from home to work often do not have the time or energy to form meaningful relationships with their neighbours. Family relationships can also suffer from long absences from home. These factors result in reduced community interaction and social capital.

And even where individuals live close to work, shopping and leisure facilities, giving them more time to undertake physical activity, heavily trafficked, polluted and often unsafe and unpleasant environments, dissuade many from doing so. Eating fresh food, particularly fruit and vegetables, can also be

difficult, particularly for those from lower socio-economic groups who cannot afford the high prices often charged for fresh produce.

Health professionals more and more recognize the importance of the built environment in directly affecting people's health and the central role that planners play in providing environments which support healthy behaviour (Daar et al, 2007; Oxford Health Alliance, 2008). Planners are also embracing this call arguing for health and planning to be closely aligned (Howe, 2007). There is no doubt that health must be part of planning as it was once (Thompson, 2007). Much of the original work of planning contributed significantly to public health. This included the creation of zoning and the Garden City Movement, both of which were designed to separate dirty polluting industries from where people lived, ensuring healthier lives. And while planning has continued to address health issues, albeit indirectly through its focus on environmental sustainability – a specific focus on health has, until recently, been secondary. It is now time for planning to again embrace the improvement of human health alongside its already well-developed concern for environmental health. Human health and planet health are inter-dependent (Research Australia, 2007).

> "The way people live in cities affects their health by influencing levels of physical activity, food choices, safety, social connection and participation, and exposure to pollutants. These influences are determinates of common, contemporary health problems such as obesity, diabetes, heart disease, some cancers, depression, injury and asthma. The way people live in cities also affects the health of the environment through loss of biodiversity, changes to ecosystems, carbon dioxide emissions and the production of other pollutants. These environmental changes, in turn, have feedback impacts on human health." (Capon and Dixon, 2007, p. 37)

Engaging with the interconnections between people's behaviour and the places they use everyday, is an exciting new area of policy and practice. In this paper we outline just how this might be done using our holistic and inter-connected schema – CHESS – Connected, Healthy Eating, Safe and Sustainable environments for health. We provide specific suggestions - using case studies and other examples – for implementing these principles. We reflect on the challenges for healthy planning and conclude with some practical steps for moving forward with CHESS – a way to strategically and holistically position the 'pieces' for environmental and population wellness.

Healthy Planning Principles

The ideas embraced by the term 'healthy planning' originated from the World Health Organisation's 'Healthy Cities' strategy which incorporates the seminal

Ottawa Charter for Health Promotion (WHO, 2005) with evidence on the social determinants of health (Wilkinson and Marmot, 2003). Designed to combat the toxic ill-health effects of particular urban environments, the Healthy Cities approach is based on the understanding that urban environments affect citizens' wellbeing in complex ways and that comprehensive, inter-sectoral policies and actions are needed to bring about change.

There are different schemas available to assist professionals who want to adopt such comprehensive and inter-sectoral approaches. The emphasis is on improving the ways in which physical and social environments can encourage and support community wellbeing in different ways. Some schemas focus on a particular aspect of the physical environment; whereas others use a particular way of addressing the people/ place connection. Different situations may well demand alternative schemas. We introduce some of these below as a precursor to outlining CHESS.

The 'Five C' principles focus on a particular aspect of the physical environment, that of the street. The aim is to make streets pedestrian and cycle friendly. Developed in the UK (Davies, 2007) they encompass the following guiding principles for design:
  - Connections – pedestrian and cycle ways must connect places where people want to go
  - Convenience – routes need to be direct and easy to use. It is important that people do not have to wait a long time at crossings.
  - Convivial – attractive and safe to use
  - Comfortable – the quality of pathways including width and construction materials
  - Conspicuousness – signage so that it is clear where pathways lead.

The Danish architect and international renowned healthy city advocate, Jan Gehl, recently suggested the adopting of his 'five stones, one bird' schema in suggesting how a city can "***invite*** people to walk and cycle as much as possible in everyday life"(Gehl, 2008). This urban place for people will be a:
  - Lively city
  - Attractive city
  - Safe city
  - Sustainable city
  - Healthy city.

Another schema takes an ecological approach as it attempts to bring together individual factors, social and physical environments and policies, to address changes in population physical activity that will bring about improvements in

health (Sallis et al, 2006). The emphasis is very much on multi-disciplinary research, interventions and approaches.

Originating from the work of Australian health professionals, a schema comprising four guiding principles of accessibility, connectivity, sustainability and flexibility has been developed by Hunter New England Population Health (Wells et al, 2007). The philosophy and thinking behind each principle is clearly outlined, together with specific design suggestions for both planners and developers who want to build 'liveable communities'. The principles are applicable to local circumstances and well beyond the Hunter. They can also be used to determine the social and health outcomes of proposed developments.

Comprehensive approaches to healthy planning can also be presented in the form of checklists or questions to assist professionals working in this area. Capon and Blakely (2007) offer ten 'checks' for those who "plan, develop and manage urban environments", focusing on the physical environment. Each 'domain' has "relevance to the health of people living in the place, and to the sustainability of the environment" (p. 51). The ten points are:
  ➢ Outdoor air quality
  ➢ Water supply and sanitation
  ➢ Housing and buildings
  ➢ Food
  ➢ Local shops and services
  ➢ Schools and other educational institutions
  ➢ Community spaces
  ➢ Transport and street connectivity
  ➢ Communication technology
  ➢ Economy and employment

Here we present our CHESS principles to add to the growing set of inter-disciplinary schemas already available. Our schema attempts to be holistic and comprehensive, bringing together both what sort of work needs to be done (**content**) and how this work can best be done (**process**). What we offer is a set of inter-sectoral, overarching principles that specifically relate to physical and socio-cultural environmental contexts in which these can support wellbeing. Further, CHESS proffers a way of working that takes interactions with professional and community stakeholders into more sophisticated inter-disciplinary and holistic approaches.

The CHESS Principles – Working towards Environments for Wellbeing

The CHESS principles enable urban planners and health practitioners, working in inter-disciplinary and collaborative ways, to strategically move towards the

achievement of comprehensive individual and environmental wellbeing at the local, regional and national levels. These principles are simply stated as different 'environments' which underpin the achievement of healthy people, places and planet. CHESS encompasses:

- ➢ Connected Environments
- ➢ Healthy Eating Environments
- ➢ Safe Environments
- ➢ Sustainable Environments

Below we elaborate on each principle, providing illustrative examples of practical implementation.

Connected Environments

This is arguably the most important principle as it relates to the environments that need to be designed and connected for health, *as well as* the inter-disciplinary environments **in** which urban planners and health professionals work. Both need to be connected in different ways if we are to support individuals and communities in achieving healthy lives.

Connecting environments for health

The environments where people live, work and undertake their daily activities need to be as supportive as possible of healthy behaviour. This means providing as many of the basic needs locally – houses, shops, schools, services and recreation – so that it is easy and convenient to get from place to place by using active transport (cycling or walking). For needs beyond the local area, connection to close-by (in walking or cycling distance) reliable, cheap and safe public transport is essential. Such a connected environment will not only improve individual health, it will also facilitate better environmental amenity. Less cars on the road means lower pollution levels, safer streets and people in the public realm where there is the potential for individuals to nurture community relationships.

Connected environments need to be embodied as key healthy planning objectives and specific provisions in **strategic planning** documents such as metropolitan, regional and local plans. This has been done successfully (to varying degrees) in different plans internationally and in Australia (Thompson and Gallico, 2005). Statutory planning regulations also have an important role in connecting planning and design requirements to healthy outcomes. Accordingly, proposals for development can be assessed against criteria that promote healthy behaviour. This is likely to be encouraged by statutory requirements that promote the following:

- well-planned networks of walking paths and cycling routes – important for both leisure and as convenient ways of getting to places in the local area and for accessing public transport ;
- streets with direct, safe and convenient access so that residential, commercial and working areas are well connected across the local area;
- local destinations (such as shops, schools, cafés and parks) within safe walking distance from homes;
- accessible and safe open spaces for recreation and leisure – places that have been designed for the needs of the local people;
- conveniently located public transport stops to encourage people to walk to catch public transport and not drive their cars; and
- well loved and frequented public spaces where everyone in the community can meet each other (after NHF, 2004).

Connected ways of working

The CHESS principle of 'Connected Environments' importantly embodies connected ways of working. Collaborating with key stakeholders, including the community, needs to be adopted as core business – rather than an 'add-on' after major decisions have been set in place. Connected ways of working require innovative decision making and political structures to achieve inter-sectoral planning, design and implementation from the outset. For example, broader, more comprehensive cost benefit assessments are needed which count the costs of *not* designing active living within different development projects. This means that the real economic impact of the 'downstream' health costs of being inactive are calculated in assessing the cost efficiency of a project in the longer term. In the UK, for example, it has been shown that transport schemes which encourage a shift from private car use to active forms of transport, such as walking and cycling, are the most cost efficient use of transport funds (Sustrans, 2007).

Connected ways of working include the public sector at local, state and national levels – government departments and agencies – collaborating across domains of influence to ensure connectivity. For example, when planning, designing and building a major new rail extension or road highway, bring active transport infrastructure such as cycle ways and associated facilities, into the proposal from the very beginning. Public/private collaborations, as well as the private sector working more inter-sectorally within its own ranks, is another aspect of connected ways of working. There is increasing attention on corporate responsibility around health issues (Oxford Alliance Summit, 2008). The health industry is increasingly concerned about escalating costs associated with obesity and inactivity related conditions (Medibank Private, 2007; Pfizer, 2007). Collaborations with professionals and researchers focusing on the creation of supportive environments for healthy behaviour are a likely outcome of this growing concern.

Working collaboratively and across discipline boundaries is increasingly viewed as an effective way to address multi-sectoral challenges such as greenhouse gas emissions and the obesity epidemic. Several Australian states and territories have inter-sectoral task forces which link health and the built environment with various other agencies. The Western Australian Physical Activity Task Force, Tasmanian Premier's Physical Activity Council and the NSW Premier's Council for Active Living are three examples. Each of these multiagency bodies strive to link the builders of environments with agencies which use those environments for service delivery to create supportive physical and social environments for active living.

Several examples of NSW cross sectoral healthy planning collaborations are underway. Some local area health services have established dialogue with local councils, developed MOUs and are providing feedback about the health impacts of draft local environmental plans (LEPs), development control plans (DCPs) and specific local development applications. Hunter New England Area Health Service has examined the key components in building liveable communities in the Lower Hunter Region of NSW as identified by developers, planners, health and social welfare agencies and the community. A consequent resource 'Building Liveable Communities in the Lower Hunter Region' has been developed to assist the urban planning industry to incorporate health and social outcomes of proposed developments as well as determining the health and social outcomes of proposed developments (see http://www.pcal.nsw.gov.au/PDF/building_liveable_communities.pdf)
The National Heart Foundation (NHF) has collaborated with the NSW State Government Developer Landcom to incorporate the NHF's Healthy by Design Guidelines into Landcom's Renwick Development – a master planned estate in the Southern Highlands of NSW.

Working in collaborative ways across traditional discipline boundaries needs to start at university. A new course at the University of NSW in Sydney is now being taught as an elective for senior students from a range of built environment disciplines – including planning, landscape design and architecture – together with medical undergraduates. Called 'Healthy Planning', the curriculum draws together current research into the relationships between health, city form and urban planning using inter-disciplinary educational models to guide lecture content and assessment tasks. Class room learning is equally matched with hands-on experience in the field. Participants work together in interdisciplinary groups undertaking a comprehensive and detailed neighbourhood audit. They are required to observe and survey selected areas to determine how well these environments supported healthy behaviour. Students consistently report learning a great deal from each other's perspectives and can see how in their professional lives they will work more collaboratively in achieving healthier

environments for community wellbeing (Robatham, 2007; Thompson and Romero, forthcoming).

Healthy Eating Environments
To be healthy, individuals need to have a good choice of fresh food which is culturally appropriate, delicious and reasonable priced. It is important that we address the current overconsumption of high density foods and low intake of fresh fruit and vegetables via the creation of healthy eating environments. The way in which this is done will vary according to community needs and cultural requirements, but making fresh, healthy food easy to find in every local community, at reasonable prices, and an enjoyable part of daily life, is the basis of creating a healthy eating environment.

As cities become increasingly consolidated with more people living in medium density and high rise accommodation without access to private open space, community gardens can provide a source of fresh food, as well as an enjoyable form of physical activity. This has been particularly successful in public housing estates (Thompson et al, 2007) and can potentially be used throughout a city (see for example, the Australian City Farms and Community Gardens Network http://www.communitygarden.org.au/index.html). Unused land, such as the nature strip, might also be considered as a part of the healthy eating environment if residents of a street are keen to create their own food garden. Working in collaboration, planners can assist communities to realise such possibilities which have spill-over benefits for local sustainability and social capital (Meenachi-Sunderam and Thompson, 2007). Conviviality is a key element of the healthy eating environment, ensuring that food consumption is an enjoyable and culturally satisfying part of daily life (Thompson, 2005; Parnham, 1992; Peattie, 1998).

Broader considerations, such as reducing the travel time of food, is also a component of a 'healthy eating environment'. Urban planners can make an important contribution to relevant policies and actions (Kaufman et al, 2007). Delivering food to people's plates in as short a time after harvest, and as close to the farm as possible, means that fresher healthier food will be consumed. Less distance travelled will result in fewer greenhouse gases being produced. Retention of productive agricultural land, close to consumers, is essential. See the Sydney Food Fairness Alliance for more information about these broader healthy eating environment issues (http://www.sydneyfoodfairness.org.au/).

Safe Environments
A safe environment is the foundation of a healthy city. Much of the safe cities work that urban planners already do directly contributes to the achievement of a healthy city. Community safety audits and the use of 'Crime Prevention

Through Environmental Design' (CPTED) can be readily augmented to incorporate specific active living principles. Cozens (2007) recognises the common goals of CPTED and active living such as the natural surveillance which eventuates when people are active in public spaces. This is particularly important for children who, in the main, are not walking to school or actively playing outdoors for safety reasons. To turn this around, collaboration between parents, police, local councils, schools, communities and transport agencies is required. And while a safe environment is important, if our environments are bland, unexciting and pose no challenge to children, this will reduce their inclination to be active. UK children's play specialist Tim Gill, has encouraged parents, practitioners and policy makers to take a more balanced and measured view of adversity and risk suggesting that uncertainty and risk are essential pieces to a healthy happy childhood (Gill, 2007).

Sustainable Environments

The final CHESS principle – Sustainable Environments – is increasingly recognised as being intertwined with human health. This is highlighted in Research Australia's *Healthy Planet, Places and People* (2007) and internationally, by the *Copenhagen Agenda* (Mandag Morgen, 2007). Much of the current work to achieve sustainability is clearly linked to bringing about environments which are healthy for people (Howe, 2007). Key objectives of 'smart growth' and 'new urbanism' contribute to sustainable environments which are supportive of good health. Sustainable and healthy environments are characterised by qualities such as walkable neighbourhoods, local food production, quality open space and mixed local land uses – a range of housing, places of work, retail outlets, services, public facilities and open space within walking and/ or cycling distance of each other. Sustainability policy is well entrenched in planning policy and practice and is a key piece in the CHESS environment set.

Key Healthy Planning Resources

There is a raft of resources available to implement healthy planning principles within strategic policy and specific action plans. The US agency 'Active Living by Design' has conveniently compiled a summary of over 100 key international assessment/ action tools that can help advance healthy planning initiatives. The collection of resources, guides and how-to manuals cover subjects including policy, land use and transportation and ranges from tools such as 'Street Design Guidelines for Healthy Communities' to a 'Transportation Toolbox' for rural areas and small communities (http://www.activelivingbydesign.org/index.php?id=550).

A range of simple audit tools have also been developed. A series of fact sheets entitled 'Tools to Measure the Walkability and Cycleability of the Local

Environment' were jointly developed by the NSW Centre for Physical Activity (CPAH) and the NSW Premier's Council for Active Living (PCAL). They are available at http://www.pcal.nsw.gov.au/resources/active_living_factsheets.html The fact sheets provide information and links to a range of international and Australian tools that can be used to measure aspects of the local environment for walkability and cycle-ability.

In Australia, an early example of guidelines developed to help address health considerations within the planning process is the National Heart Foundation's 'Healthy by Design' resource (NHF, 2004). In a more recent systematic approach, the West Australian Planning Commission has developed a set of design guidelines entitled 'Liveable Neighbourhoods' that has become a mandatory consideration for all Greenfield developments within that state. Griffith University researchers (Burke and Brown, 2005) have constructed a diagnostic tool for assessing whether development proposals adequately address transport sustainability, including active transport.

The NSW Premier's Council for Active Living (PCAL) is leading the way in NSW on healthy planning issues. PCAL aims to build and strengthen the physical and social environments in which communities engage in active living. It comprises senior representatives from across government, industry and the community sector. PCAL was established in 2004, replacing the NSW Physical Activity Taskforce (1996 – 2002). The 'Designing Places for Active Living' web resource (http://www.pcal.nsw.gov.au/planning_design_guidelines) proposes key design considerations for urban places in metropolitan, regional and rural areas. The resource has been developed in the context of the NSW planning system, linking policies and processes that support active and healthy communities, as well as specific considerations with links to other key resources for a range of 'environments' including walking and cycling routes, public transport, streets, open spaces and shopping centres. NSW better practice case studies demonstrating the translation of the key design considerations into practice for each of the 'environments' are also provided.

As part of its work, PCAL has prepared a 'Why Active Living Statement' which brings together the views of its member organisations. The Statement clearly sets out the implications of an inactive population on human health, the environment and the economy of NSW, and how these issues can be addressed by government, the private sector and community advocates. Of particular interest to planners are the links made in the Statement to Government planning policy and the key role supportive physical environments have in facilitating greater levels of activity and as a result significantly improved health.

Challenges for Healthy Planning

Despite the compelling health arguments for embracing healthy planning, both policy adoption and practical implementation face different challenges. We unpack some of the key challenges below.

First, inter-sectoral dialogue and action – a universally critical principle of the different schemas discussed in this paper – is not disputed in theory but difficult to implement in practice. To bring genuine and lasting inter-sectoral ways of working about, we have to move beyond our professional comfort zones and put aside plays for power and supremacy. We have to actively listen to each other and drop jargon in an effort to communicate effectively and respectfully of the other's position. We also have to listen to communities and hear what they have to say about their wellbeing needs and wants in their local areas. Education must embrace interdisciplinary modes of learning to develop inter-sectoral literacy. This will help to ensure that the professionals of tomorrow are equipped to work across the traditional 'silos' in collaborative and cooperative ways.

Second, we have to find a risk management strategy that accommodates inter-sectoral collaboration as a fundamental way of doing business. It is necessary to move beyond the straight jacketing of insurance policies that define the boundaries of public use, generating fear in practitioners of going beyond those boundaries. Will we eventually come to a point where public and private providers of built environment facilities, will be liable for NOT providing supportive physical and social environments if such non-provision can be linked to future chronic ill health?

Third, the economic challenge demands that we recast the way in which we price small and large developments. The longer term health consequences of different built environments on future populations – the people who will live and work there – must be factored into key infrastructure decision making. Both the direct costs of becoming unwell and the indirect costs associated with that, such as provision of carers, loss of productivity and the need for adaptation of environments, have to be included.

Fourth, the domination of the multinational retail outlets and shopping centre developers and the failure to connect such developments to other uses and active transport. The challenge encompasses the way that these companies dictate and monopolise food markets and distribution; and build stand-alone shopping centres which in turn dictate transport choices. The deliberate disconnection between the shopping centre and the surrounding neighbourhood (be it the blank wall enclosing the shopping centre or the geographic divide between the

old strip shopping area and the new shopping mall) is another aspect of this challenge.

Fifth, political commitment to long term and inter-sectoral change. This is hampered by short political terms, a focus on 'quick-fix' solutions, as well as ministers and government department heads who battle each other rather than valuing collaborative and connected ways of working.

Sixth, there are equity issues in implementing environments which support health. Housing providers may argue against providing infrastructure such as wide pavements to encourage walking, additional open space for children's play, cycle ways and enhanced connections to public transport. The argument will no doubt be an affordability one based on calculating the short term costs which such infrastructure can add to the price housing. Longer term and broader economic benefits for health have to be factored into this equation (for example, reductions in prescriptions for diabetes medication and lower hospitalisation rates due to fewer heart attacks or strokes). In areas where individuals cannot pay, public sector subsidisation of supportive environmental infrastructure for wellbeing needs to be considered.

Finally, cultural change represents a complex and profound challenge. The achievement of healthy places and people requires much more than dedicated and hard working health professionals and planners. For the community at large, longer working hours mean that it is not easy to find the time to be active, to shop for fresh ingredients or cook healthy meals. Physical activity not only has to be designed back into our environments, it has to be fun and desirable and what we do as part of everyday life. Environments have to *invite* people to be active every day (Gehl, 2008). Our multicultural communities must have culturally appropriate facilities provided. And even with effective cultural change campaigns (we can certainly learn important lessons from the successful anti-tobacco campaigns – see Chapman, 2007) there are broader societal and philosophical challenges we face – our consumerist lifestyle and long working hours.

It is arguable that a re-visioning of our way of life is required so that we might move to envisaging a new way of life that has environmental and human wellbeing at its core. This way of living, based on the healthy planning principles articulated here, will encompass a different life to that of most Australian city dwellers today. This life will be locally based, lived much more in public places and spaces (rather than being isolated in the private realm), and involve different forms of active transport use, with decreasing utilisation of oil dependent vehicles. Further, this will be a life that involves much more working from and close to home, and values community connections across cultural and

age differences in shared activities such as shopping for locally sourced food, eating together in convivial surrounds, gardening in communal plots and enjoying being physically active in local parks and play areas.

Taking the CHESS Principles Forward

The creation of supportive environments for physical activity and social connectivity provides planning and health professionals with a unique opportunity to be proactive and positive in addressing the wellbeing of local communities. Below are some practical suggestions for how this might be done working with the CHESS principles in the short and longer term.

What can I do tomorrow?
- Review different key references on the PCAL web site – for example, the NHF's guidelines *Healthy by Design* and the NSW Government's *Planning Guidelines for Walking and Cycling*; sign up for the PCAL E-bulletin update.
- Start talking to work colleagues about healthy planning emphasising its positive potential for improving community wellbeing.
- Reflect on personal levels of physical activity and healthy food consumption – what changes to the environment would make healthier life choices inviting and the most obvious choice?
- Reflect on personal transport choices – are there ways to reduce your ecological footprint? What healthier (for you and the environment) transport options can you adopt?

What can I do in the medium term?
- Work with colleagues to put healthy planning on the agenda of your local council – tell them that this is a big problem (the obesity epidemic, for example); healthy planning has lots of synergies with safer cities and environmental planning/smart growth – work to get council politically committed to implementing healthy planning – make the case for linking healthy planning to environmental sustainability to safety.
- Develop a list of healthy planning priorities for the local area – this will be ongoing and will respond to audit outcomes, current levels of service provision, community needs, etc.
- Encourage and support the development of a locally specific DA 'healthy environment check' – this can be used as a guide in talking with developers about their proposals and assessing submitted DAs for inclusion of healthy planning principles.
- Lobby for the establishment of a healthy planning community committee comprising relevant council officers and councillors, Area Health representatives, local medical practitioners and health care providers, active transport advocates and community members.

- Promote events which support healthy behaviour – farmers market day, active school's programs, community cycle day, walk your pet day, etc - work on initiatives that are locally and culturally appropriate.
- Undertake a personal healthy behaviour audit to increase personal awareness of how environments do/ do not support a healthy lifestyle – use this tool to develop the awareness of others.
- Look for leadership about healthy planning initiatives – from politicians and within the community.

What can I do in the longer term to create healthy environments?
- Undertake a systematic program of local area healthy planning audits (and have a priority of upgrading environments so that they are more supportive of healthy lifestyles).
- Undertake an assessment of the health of the local community using the 'Social Determinants of Health' framework.
- Using an inter-sectoral approach, formulate a comprehensive public health / healthy environment plan.
- Lobby relevant state government agencies to incorporate healthy planning provisions in strategic planning documents – at the metropolitan and regional levels.
- Lobby relevant transport agencies to significantly improve public transport at state, regional and local levels.
- Incorporate healthy planning provisions in DCPs and LEPs (building on using the healthy planning check at the DA stage and undertaking healthy planning audits of the local area).
- Support on-going research into healthy planning interventions to establish understandings of what works and what does not – collect stories from communities / case studies – what works and what inspires!
- Seek out long term collaborations/ partnerships with appropriate private sector companies (e.g. sponsor of park upgrade; provision of cycle way; farmers' market).
- Develop employee incentive packages (e.g. salary deduction schemes) for public transport travel passes and private bike ownership. Instead of rewarding senior executives with cars and car parking, reward them for using active transport.
- Establish bike fleets for staff completing short trips for work purposes.
- Provide for bike parking for staff and visitors; include appropriate end of trip facilities such as showers and lockers.
- Establish innovative key performance parameters/indicators that embrace corporate responsibility around healthy environments – along with key environmental, social and economic targets.

- Work with schools and youth groups – hold a CHESS competition – award the best healthy check mate environment!

Conclusion

Healthy planning is an interdisciplinary response to a complex problem. Urban planning originated out of the need to create healthier cities. Today we have come full circle to once again take action to address the ill-health of urban populations. Planning alone cannot solve the problems. Nor can health interventions. We need to work together to address the issues. This is a great opportunity for the health and planning professions to demonstrate how we can work supporting one another in collaborative partnerships, and with multiple stakeholders, taking an over-arching comprehensive view of issues positively and proactively for the future wellbeing of our community and the environment.

Let's take the initiative and position the pieces for environmental and population wellbeing – the CHESS principles provide a way forward.

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