Who is Excluded from 'Universal' Health Care? Rurality, the Marginalization of Health Services, and Moving Beyond Social Capital

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Abstract: Universal health care, like universal education, is woven into the concord of modern citizenship. Yet how is this universality benchmarked, defined, configured, and framed? This theoretical article probes the health services in rural, regional, and remote areas, and explores the standards that are both expected and offered. This is a paper of advocacy and interpretation, demonstrating how the absence of regional planning and development is part of a wider neglect of universal health care in an under-regulated, under-funded 'national' system. Further, this research offers a retheorization of (post)social capital, opening regional, rural and remote health to new conceptualizations of resilience and wellbeing.

Keywords: Universal Health Care, Regional Health, Regional Inequality, Social Capital, Resilience, Wellbeing

1. Introduction

Universal health care is a benchmark for democracy, equality, and social justice. Yet it remains a compliance rather than excellence model, configuring minimum requirements to ensure that most people receive adequate health care. Yet the phrases 'most people' and 'adequate health care' are ambiguous, vague and float through a range of political ideologies and agendas. A range of inelegant proxies are deployed, such as the average age of death in a region or nation, maternal mortality rates or survival rates from cancers. These proxies render invisible the seismic and debilitating injustices in regional health. Therefore, this article activates a precise focus and agenda. This research probes the exclusions in supposedly 'universal' health care, with attention on the marginalization of regional and rural citizens.

Our study is nested – and springs from - regional, rural and remote South Australia. This state is unusual. It has a large capital city – Adelaide – at its geographical base, but an array of third tier cities, such as Port Lincoln, Mount Gambier and Whyalla that fan from it, and a spectrum of small towns and remote settlements throughout its 983,482 square kilometres (379,725 square miles). In size, it is equivalent to, and demonstrates some similarities with the province of Ontario in Canada, without the benefit of a global city and huge population base of Toronto. In European terms, the state is the combined area of France and Germany, again without the multiple mega-populations of global cities. Therefore, the bulk of the state's population is located in one city. Adelaide is an anchor, one pole of a magnet that pulls and attracts the services, the population and the normative expectations of health, education, work and leisure. Therefore, this state is an ideal location to explore how marginalization operates outside of capital cities. The policy of universality which appears to be held by Country Health SA (South Australia) aims to provide equitable

access to health services to all, thereby reducing health services to the minimum functional operations. Specifically, in a desire for standardization – rather than standards – and risk management, the health professionals in regional and rural areas are undermined, denied, marginalized, and forgotten. The desire for 'universal' health care is an urbanized model, resulting in the detriment of services, with profound consequences for patients and their families. The expertise of regional, rural and remote professionals is disrespected through aligning urbanity and excellence. The inability to fully utilize local expertise is further exacerbated by the inability to work across the public/private divide.

This theoretical article is written by a scholar professional in allied health and a specialist in rural and regional development. This is a research project of advocacy, to provide strategies to empower local practitioners and create a realization that 'universal' health care undermines and truncates the life, respect and integrity of rural and regional people. Using – and transcending - the politically volatile concept of 'social capital,' the goal is to reveal the undulations of injustice and expectations that create normative marginalization for rural citizens regarding health.

2. Social Capital and Social Inclusion

Social capital maintains a diversity of applications in policy environments and the research literature but requires a clear presentation of its political origins and rationale for its popularity. Putnam, Leonardi and Nanetti confirmed that social capital is a feature of social organizations, including "trust, norms, and networks that can improve the efficiency of society by facilitating coordinated actions" (1993, p. 167). Ambiguous terms such as trust, and common good are deployed. Activating civic life, the role of local, state and national governments in framing and enabling its formation is ambiguously configured, with the focus on 'networks' and 'society.' The role of 'top down' initiatives in health and education to address marginalization and injustice is unclear. Instead, policies provide strategies and spaces for collectivity and community activism (Ostrom, 2000). Health and education, work and leisure are key hubs of life, living, participation and community. They are the punctuation of human relationships, aligning public and private roles, behaviours, and outcomes.

Social inclusion and social capital reached their height as concepts in the 1990s (Silver 1994). After the presidencies of Ronald Reagan and the prime ministerships of Margaret Thatcher, the desire to reconsider and reconfigure new theorizations of individuality and community outside of state-based directives was potent and important. Anti-statism, the foundation of neoliberalism, meant that individuals, choice, market forces and agency became tropes for economic growth and social progress. Yet emerging after this Thatcherite and Regan period, Skocpol confirmed that, "organized civil society has never flourished apart from active government and inclusive democratic politics" (1996, p. 25). The impact of Robert Putnam, first in an academic article (1995), and then in the scholarly monograph *Bowling Alone* (2000) reinvested small 'c,' conservative localism with meaning, texture and importance. Community relationships were important, more significant than governmental directives for equality and redistribution of wealth. Indeed, the adjective – social – added to capital was a clever and insidious negation and critique of the political economy. Politics became soft, detailing communities and their participation in sport, local organizations, and personal relationships. Further, Putnam confirmed that there were regional differences in the exhibition and application of social capital, with states such as Vermont revealing high social capital levels. Mississippi showed lower levels. These place-based differential results were confirmed in a

separate study over a decade after Putnam's monograph was published (Hawes, Rocha, & Meier, 2013). Put another way, affluent, well educated, widely employed citizens cared for each other and the community. Areas of radical injustice and marginalization – based on race, class and / or gender – were atomized, individualized and anti-community.

Through hyper-individuality and critiques of the state carried through neoliberalism, the capacity to participate and belong in a geographically constituted community remains important. Yet if the fundamentals of life – food, shelter, health, and education – are in place, it is much easier to be generous in time, support and the sharing of capital, social or otherwise. But it is profoundly disingenuous to suggest that a lack of social capital creates inequality. This is neither causal, nor correlative. That is why national policies for health and education are required. Injustices exist. How they are managed and addressed remains politically volatile. But to address these inequalities, intervention is required. Relying on 'communities' and 'social capital' will ensure that Vermont will continue to excel in benchmarks of health, education and wellbeing, and Mississippi will lag. National directives and incisive interventions are required to transform places and spaces of marginalization and inequality. McIntosh describes the "importance of place-based approaches to guide primary health care" (McIntosh, 2019, p. 144). Public health – like public libraries and public education – was fuelled by post-war Keynesianism. Yet as neoliberal imperatives gained policy traction through the globalization of trade and financial markets, the welfare state – and its commitment to public good – was battered by a range of social forces. These include increasingly casualized and precariat employment and under-employment (Standing, 2013), the ageing population and a shortage of trained health care providers particularly for end-of-life and palliative care, and an increasing rate of women in the workforce, which necessitated childcare facilities that were privatized. The argument in this article is that anti-statism and the privatization of public services and infrastructure most impacts on the regional, rural and remote locations. Inequalities have a location, place and environment. This context of systemic injustice is revealed through housing, digital infrastructure and transportation.

The argument of this article is not anti-community building, or the private provision of health or educational facilities. Indeed, it argues for the necessity to create a matrix – a weave – between private and public resources and personnel in regional, rural, and remote areas. Hoping that the private sector – the community – can address structural injustice without the scaffolding and spine of public support is naïve and ideological. However, assuming that the health and education professionals in regional, rural, and remote regions are in deficit, are under-qualified and lacking experience, is similarly naïve and ideological. Social capital requires political capital to be mobilized, framed, and shaped. Such a relationship commences through the recognition that regional, rural, and remote regions, and the people who live within them, are professional, competent, rational, and complete. They understand their place, space, and people. Finding the balance between public and private, urban, and rural, power and deficit, is a potent and challenging dance. But this dance commences through recognizing the knowledge, literacy and expertise is found in a diversity of locations and communities. It comes from recognizing that historical neglect has had an impact on infrastructure in regional, rural and remote environments and this injustice cannot be corrected by actively forgetting this history and assuming that the ambiguously configured social capital can provide the band aid to mask the lack of nurses, teachers, hospital beds or awareness of the professional expertise resident in these locations. Imposing a capital city's assumptions over regional, rural, and remote communities – through benchmarks, accreditations, and key performance

indicators – works from the basis that large cities are the managers of quality and excellence in health and education.

Economies agglomerate through urbanity. In such a policy environment, rural regions are configured as in deficit (Meijers & van der Wouw, 2019). The 'family farm' is a focus for rural sociologists (Bjorkhaug & Blekesaune, 2008; Friedland, 1984; Friedmann, 1980). Such a focus nests effectively into Putnam's social capital. Families are the building block of communities. But such analysis is reified and simplistic, perpetuating a particular version of the heteronormative family. While globalized agriculture has many critics, the sustainability of models of family farming, when both families and farming have transformed, remain challenging. As shown by Bronson et al, food politics requires more complex social organization (2019). However, by activating outlier policies and strategies, new modes of development can be summoned and activated, but it requires arching beyond fragmentation and marginalization.

The recent theorizations of social capital have placed attention on inequality. While regional variations permeated Putnum's research, Markowska-Przybyla and Ramsey have shown that social capital can be studied in relation to inequality and the unequal distribution of resources (2019). The emerging research on the relationship between health and social capital is not yet revealing definitive results. Robert Putnam offered his usual rhetorical flourish: "if you belong to no group but decide to join one, you cut your risk of dying over the next year in half. If you smoke and belong to no group, it's a toss-up statistically whether you should stop smoking or start joining" (2000). For Putnam, the lack of social capital was the new nicotine. More recent studies have confirmed gendered differentiation in the relationship between health and social capital (Anwar, Astell-Burt, & Feng 2019). It remains a challenge to map geography over health variations. The imperative of neoliberal policy directives is to individualize symptoms, life choices and risks. Empirical research can often spill into empiricism within the health discourse. Therefore, and as argued by Sarah Curtis and Ian Rees Jones in their seminal article in health geography, theory does matter. They confirmed that,

> Geography does have a place in our understanding of inequalities in the health experiences of individuals and communities. Contextual effects associated with place and space, which may be quite complex, need to be considered together with other more individual theories about the processes and explanations relevant to health variation. If we are to construct effective policy responses to health inequalities, especially at the local level, then it is essential that these are informed by an understanding of the potential importance of place for health (1998, p. 667).

Significantly, Curtis and Rees Jones were not convinced by social capital theories. Further though, in their exploration of the urban and rural divide, their theorization was developed through the gauze of the English experience. The ideology of the English pastoral myth – the green and pleasant land – is not generalizable to Dubbo, Tennant Creek or Mount Gambier. Particularly, the experience and expertise of rural, regional, and remote health professionals was outside of their study. Therefore, we continue their focus on theory and theorization, local and localism. We also transcend the social capital theory to welcome an innovative – if controversial – scholarly revisionism of the concepts of resilience and wellbeing.

The role of social capital in rurality is transformative of both rural environments and the concept itself. "Relational trust" (King et al. 2019) is required. Rural sociology can activate a version of social capital.

With trust at the centre, community development is the focus. However – and this is where neoliberal ideologies infuse and infect the concept – local community commitments provide the replacement for strong national, regional, state-based, or provincial funding models. This anti-statism relies on the goodwill of local citizens to medicate – literally and metaphorically – the lack of resources provided from government. This type of approach is shown in Parrilli, Aragon, Iturrioz and Narvaiza's study, exploring how social capital can reduce the gaps in "regional innovation systems," caused by "managerial gaps," or "structural holes" (2019). Instead, social capital transforms and changes when infused by social activism (Peck, 2020). It is not possible that rural and regional communities, confronting multi-fronted inequalities, mobilize "social capital" to plug the errors, gaps and mistakes in regional, state-based, and national policies and funding models. Therefore, this inflection of the concept is critiqued in this article.

We argue that (post) social capital, noting that the role of the 'post' is to critique and encourage reflection on the word/s that follow it, can enable radical new configurations of both resilience and wellbeing. These two words have been overwrought through the self-help industries. But David Chandler's theorization in Resilience: the governance of complexity (2014) has moved debates from psychology to public policy. For Chandler, the concept is no longer detailing how individuals can manage failure or tragedy, and 'bounce back' to social mobility and success. It is not a trope to manage failure through positive thinking and individual effort. Instead, he explores how – after the liberal modernism that so infused social capital as a concept – processes, infrastructure and governance structures can become resilient. For example, Woolcock confirms that a high level of social capital increases the community's ability to cope with poverty and the vulnerable members of the community by assisting in the resolution of difficulties and decreasing violence (Woolcock, 2011). This definitional shift ensures that policies are robust, and can sustain redundancy, failure, instability, and uneven development. Recognizing the ontology of life's complexity, and deploying historical sociology, continental philosophy, economic theory and theoretical physics, the unknowability beyond epistemic limits becomes clear. Chandler critiques modernist ontologies, liberal theories of progress and neoliberal theorization of human reasoning and choice to offer "a way of thinking about how we think about the being of being" (2014, p. 47). Avoiding universalist approaches, there is no emphasis on 'top down' or 'bottom up' approaches – public policy or social capital. Further, there is no division between public or private solutions. Resilience becomes a matrix – a plait – of solutions and opportunities, while always recognizing that 'choice' and 'agency' operate systems of injustice, inequality and marginalization.

Similarly, revision of Putnam's social capital, with strong engagement in post-globalization after both September 11 and the Global Financial Crisis, is Jonathan Joseph and Allister McGregor's Wellbeing, resilience, and sustainability: the new trinity of governance (2020). Aligning these three concepts, they show the value of "inclusive growth" (2020, p. 2). Noting the radical shifts of the 2010s, they recognize that "something must change in how we prosecute economic development and societal progress (2020, p. 26). Moving away from individualism, productivity, and efficacy, they reveal the profound cost of "post-crisis rationality" (2020, p. 39) and the declining rates of public funding for health and education.

Through these two interventions in social capital, by reconfiguring resilience, wellbeing, and the role of the individual in social systems, new strategies for theorizing regionality, rurality and remoteness emerge. The deficit model dissipates, and new relationships develop between private and public providers, rural and urban relationships, and experience and expertise. The second component of this article focuses on

the rural, regional, and remote locations, with attention to the enabling capacity of regionalism and health provision.

3. Injustice and Absence – Justice and Visibility

Multiple injustices cluster in rural areas. Communication systems, particularly enabled through online interfaces, are uneven (Strover et al. 2019). Public health, public education and public library infrastructures are much more important in rural and regional environments, as economies of scale connote that it is more challenging for private companies to make profit. Understanding the issues confronting medical practitioners and allied health professionals in regional areas offers strong evidence for a new way of thinking about social justice and connectedness.

Mount Gambier is a strong and innovative example of a third-tier city (Brabazon, 2015). The second most populous city in South Australia, its population is just under 30,000 people. It is 450 kilometers south east of Adelaide, and only 17 kilometres from the Victorian border. Therefore, it holds a substantial population, but is a great geographical distance from the capital city. This disconnection poses challenges for both health and education. Through the 2000s, the general practitioners in this region were removed from providing services at the hospital and replaced by salaried doctors, many of whom had only provisional registration to work in the one area, as they were international medical graduates who had not completed the requirements for full registration in Australia at the time of their employment. They were unable to prescribe or consult outside the hospital as they did not have a provider number and therefore could not access Medicare.

Such challenges are also shared with allied health professionals. The provision of specialist paediatric physiotherapist services such as the correction of infants with talipes equino-varus, which could be treated locally by a qualified operator, was not allowed by Country Health SA because the service could not be provided across all areas of their jurisdiction. Such attitudes do little to engender professional satisfaction. The cost of providing the service is increased for both the provider and the recipient when the family must travel to the capital city on a weekly basis to access the treatment which could be provided locally if allowed.

If a truly patient-orientated service is to be offered, encouraging good interprofessional services and greater patient and family satisfaction, a move towards greater collaboration must be instituted where the social capital of the region is fully utilized. Social capital has been described by O'Toole and Schoo (2010) as networking with collective action for community benefit. It can build on the traits and aspirations of individuals for the benefit of the community by facilitating collaboration and partnerships which will benefit the whole community. They claim that it "can facilitate social entrepreneurship" and "develop capacity to respond to change" (O'Toole & Schoo, 2010). Such leadership can help create opportunities for community development. In recognizing local expertise, further career pathways may be encouraged, thus contributing to the retention of allied health staff in rural and regional areas.

Key research is required that explores how to create engaged, robust, resilient networks of care. The rights of rural, regional and remote citizens – in terms of both services and support – are undermined as infrastructure in health and education in particular are threatened. Attention to "rural citizenship" (Kelly & Yarwood, 2018) can intervene in the deficit model of human rights as actualized in non-urban areas.

Focusing considered attention on not only inclusion and exclusion, but how they are manifested in social and cultural practices is the key mechanism to transform a "flat ontology of scale" (Jones et al., 2007)

The question becomes how much we should use the expertise of professionals in a regional area, and how that may impact on equitable services across the State? If outstanding medical and allied health professionals live in a regional, rural, or remote environment, then the ideologies of urbanity transform. The assumptions about capital cities, quality, excellence, and service are challenged. Without understanding the specificities – the unique urbanity – in regional, rural, and remote areas, inequalities and injustices are perpetuated. Further, a lack of professional satisfaction emerges from staff, intensifying the problems of retention of medical and allied health workers in rural and regional Australia.

A recent account of a retired Professor of General Practice providing a locum medical service in remote northern South Australia highlights the invisibility of local expertise, causing hardship to both local and tourist populations in the region. The article reported in the *Medical Observer* on November 29, 2019 describes the stabilization and MedStar evacuation of a critically ill woman who had been commenced on life-saving treatment by the locum doctor prior to her transfer to a tertiary hospital in Adelaide. In commending his treatment, it was discovered that his credentialing for critical care was "out of date" with a subsequent denial of payment for his services by the government service which had employed him. Thankfully, following legal intervention he was subsequently remunerated but of more importance to him, he received commendation from the patient and her family for saving her life.

Breaking down the barriers of professions and lack of collaboration and teamwork, facilitating each member of the team to contribute to provide the highest possible standard of healthcare, is an empowering aim. Patch protection and jealous guarding of position can contribute to a health system that blocks the delivery of a quality service, masked by the phrase "universal health care." The expansion of rural clinical schools has contributed to a growth in community collaboration and understanding of rural medical training. Community members are being actively involved in study projects run within the community giving an opportunity for each group to better understand the other. Worley et al. have shown that the students gain a better understanding of the community and embrace the students and their work with enthusiasm (Worley & Maynard, 2011). The students develop a closer understanding of the fabric of the community and the varied economic and social structures within that community. Medical students trained in this way are more likely to remain in rural and regional areas to work after graduation. In the Mount Gambier region, projects that have begun as student endeavours, have gone on to become a regular part of the community framework. The Kids Health Initiative is a fine example of collaborative work. This programme was run through local shopping centres and schools involving medical students together with schoolteachers and students meeting with members of the community. The programme was continued by the schools and community members after the research project was completed.

This use of community expertise has enriched the city and its region, thus contributing to better understanding and collaboration with long term benefit to the community. Leadership commencing in a third-tier city also has an impact on the encircling region. This impact has been clearly shown in the Limestone Coast region with the growth of the rural clinical schools and the collaborative work being carried out across the smaller communities in the region. Paul Worley described this as building the social capital of a community by developing a strong academic and community collaboration (Worley &

Maynard, 2011). Through our conceptual challenge to social capital in the first part of this article, we can see that infrastructural resilience, sustainability and wellbeing can be configured and enhanced through the considered amalgamation of public and private, individual, and collective.

Programmes such as this could be easily transferable between regions with educators and health professionals encouraged in their professional development and dissemination. Imagine how this translocal sharing could increase the health literacy of the community. Such collaborative programmes also reveal the challenge of measurement and benchmarking. How is health literacy assessed? How is access and inclusion for people with disability calculated? For disempowered and marginalized groups, greater visibility is possible in regional, rural, and remote regions. Clearly, in smaller and more personal groups where specific examples of inequity can be seen, changes can be implemented and tested at greater speed. This may lead to wider acceptance of successful models, spreading the growth of social justice and thereby (post) social capital more widely. But this will only occur where there is a genuine sharing of successes and failures from which all can learn. Failures by their nature, demand explanation and much can be learnt from them when there is a willingness to analyze the reasons for the failure and openly discuss alternative methods which may prove better. This model can clearly be seen in the early infant hip screening programme which commenced in Mount Gambier as part of a research programme and has since been established as an option for new-borns in one regional centre in South Australia as a result of community demand. It is recognized that late diagnosis of increased mobility in infant hips can lead to poor development and subsequent lifelong problems, but we have seen little interest in investigating the screening process in other parts of the State.

4. (Post) Social Capital and the Future of Regional Health

This article offers a revisioning of social capital with attention to regional development. Putnam in 2000 described it as the mitigating factor for either the collapse or renewal of American communities (Putnam, 2000). Social capital is seen by some to have a positive effect on health services while others consider that it has a negative effect. Ferlander considers two distinct forms of social capital, structural and cognitive, where structural SC is embodied in the social networks of a community and cognitive SC recognizes the norms of reciprocity and trust within a community (Ferlander, 2003). Included amongst the elements of social support are emotional support, information sharing, instrumental support and social companionship. Each of these attributes contributes to the social cohesion of a community and is clearly tethered to Putnam's assertion that belonging to a group has strong implications for better health. The attributes of social cohesion can be divided into vertical and horizontal components which together contribute to the bonding and bridging effects which can be seen. Vertical components build social capital through bridging in hierarchies within the workforce, church communities and community relationships between government management and the citizens. Horizontal attributes promote bonding through volunteer organizations within a community, where community networks and inclusion are fostered.

Social capital cannot be measured. An array of problematic proxies gauges the bonding, bridging and social interaction of a community. Putnam described the downfall of communities in the late 20th century when he talked of "exburbs" where people sleep and work but do little else, leading to the breakdown of communities with their groups, clubs, and social gatherings. He observed a decline in social responsibility and volunteering. He described social capital as building bonds, bridges, and links. He states, "social

capital provides the glue which facilitates cooperation, exchange and innovation." The relationship with health remains ambiguous and difficult to determine. Later research probed the value and importance of trust.

In a study of rural populations in China, Yip et al. (2007) – demonstrating a conceptual similarity to Ferlander- described two major components of social capital, those formed on structural grounds and those on cognitive grounds. In discussion of these groups they found that trust was the highest contributor to individual health improvement, promoting networking and social cohesion (Yip et al. 2007). Volunteering and organizational membership were found to be consistent with collective action, but little difference was seen in overall health because of organizational membership. Conversely, income polarization reveals profound consequences for health outcomes (Yao, Wan, & Meng, 2019). That is why a movement to infrastructural markers of resilience, sustainability and wellbeing are more appropriate in considerations of health.

The World Health Organization in 1948 defined health as, "a state of complete physical, mental and social well-being and not merely an absence of disease and infirmity." More recently health has simply been defined as an absence of ill-health. Baum and Ziersch warned of unique distributions of different forms of social capital having the potential to reinforce existing health inequities (Ziersch & Baum, 2005). Bonded groups of like-minded people constructed around single issues are not – however – always a benevolent or positive cultural force. Power is asymmetrically configured. Those with more power or status within a community may have the ability to swing government and other funding bodies in their favour when it may not be in the best interests of the community at large.

Because of the time of his research, Putnam did not investigate the complex configurations of digitization, deterritorialization and disintermediation. Indeed, the sociology of health has not created the post-disciplinary links to understand the fragmentation of the online environment and the value of interfaces such as YouTube for building international communities around specific illnesses, such as Parkinson's disease, or the sharing of caring responsibilities for a spouse, parent or child. Relationships and connections can be created in a way that transcends geography, as much as are hooked into it. Ziersch and Baum explored changes in social capital with the increasing development of internet usage, suggesting that it could contribute to a decline in face-to-face communication and a breakdown of community consensus in decision making, lessening the strength of any drive for change (Ziersch, 2009). This is a particular rendering of digitization that is critiqued through the proliferation of mobile phones that enables content to be shared with participants both nationally and internationally, sharing common aims and ideas, including local knowledge and information. There is never-the-less, a lowering of community attachment in such an international group and this can contribute further to the breakdown of local expertise and collaboration. In optimum health care, there must be a balance between the broad range of treatment and management options which can be found internationally and the high standards of safety and practical application which apply in Australia. The importance of combining digital collaboration with local knowledge and information is clear. This careful weaving of analogue and digital, local and international, individual and social, necessitates new strategies to understand community, connection and communication. These new definitions of social justice require the infrastructure to match the expectations. For example, despite the continuing roll out of the National Broadband Network (NBN)

there are still large pockets where it is unavailable as well as many residents who are unable to afford the cost of connection (Warburton & Cowan, 2012)

The development and expansion of internet communication networks has created major questions about the definition of social capital as it has been applied to health. Ziersch and Baum (2009) continue to separate analogue and digital far too cleanly and clearly. They argue that the physical environment, neighbourhood connections, perceived safety and local civic action are the most likely to improve physical health. From their argument, digitization inhibits the development of these attributes and actions. Previously confined to geographic areas, there is now a huge increase in digital communities expanding social capital to a global concept with subject similarities but vast geographic dissimilarities. Such a description could be developed in the health system in Australia where digital communication can enable instant contact worldwide with people of similar interests and compatible areas of expertise. However, this is not the model being adopted in regional Australia. Health is bound by centrally based guidelines with apparent lack of consideration of access and compatibility across disparate contexts. Indeed, little use is being made of digital expertise which could increase access to specialist services without the need for long and expensive travel for any rural residents. Strong models of telehealth can be seen in outer regions of Queensland where families are supported to make regular digital contact with therapists for assessment and management of physiotherapy programmes, but the service has not so far been expanded across South Australia. Such means of communication can increase knowledge spread rapidly, but is at the same time, more sensitive to misinformation. For health information, this can lessen travel time for specialist consultation and health advice.

In consideration of the varied models discussed in the literature, it is pertinent to attempt to relate the findings to regional health in South Australia and more specifically, to the two regions studied in the research on infant hips attempted in the Riverland and the Limestone Coast. Differences in social capital combined with variation in health literacy, particularly as it relates to infant hips, was observed in these two regions and these differences had a remarkable and devastating effect on the research being conducted there. These differences were reported, discussed, and published in Sue Charlton's doctoral thesis, which was completed in 2019. Using the compilations described by Yip we can see that the structural groups, based on social networking created a more cohesive approach to the research in the Limestone Coast region, with strong development of trust and cohesion which was not developed in the control site. Ferlander describes institutional or formal trust in the system as a significant indicator of social capital and suggests that this can be generalized or specific to times and places (Ferlander, 2003). Such trust can result in an individual or a collective benefit. The individual benefits may include job opportunities and emotional health which will both contribute to good health.

The impact of geographic and locality differences and their effect on health problems has been discussed by Sir Michael Marmot particularly in relation to outcomes in diseases such as diabetes, heart disease and obesity (Marmot, 2005). He describes marked differences in survival rate impacted by place of dwelling and access to services. In Australia, vast differences in geography, economics and climate can be experienced and are a clear indicator of the differing effects in health status. Yet, regionality continues to be poorly configured, studied and understood in the health system in Australia. There are political and geographical explanations for this but particularly in its effect on families and children its impact can be serious.

Further occurrences within Country Health SA have prompted a re-visited exploration of what contributes to "generalization" of services across the State. The negative effects of globalisation outlined by Baum can be seen clearly in regional South Australia, perhaps nowhere more clearly than in the Limestone Coast. In 2019, the local general medical practice in Mount Gambier was recently recognised by the RACGP as the Practice of the Year in South Australia and the Northern Territory. After this acknowledgement, it was followed by the overall National Award. Many of the doctors and staff in this practice have been continuously providing family medicine services to their community for greater than forty years over the 65 years of its existence. This practice has provided ongoing clinical training to students and registrars over its lifetime. Significantly, this collective knowledge is not sought or welcomed in the development of the new Local Health Network of Country Health SA. The GPs have been disallowed from attending their own patients when the patients are admitted to hospital. All patients must be re-assessed, and admission decided on arrival in the Emergency Department. There has been no discussion with these primary health providers into future needs for the community despite their long-term care for the local population. Instead, size matters. Renderings of expertise and urbanity are valued and validated. Social capital and health literacies predominate. Aggregation of people is assumed to enable social and economic development (Meijers & van der Wouw, 2019). We are reminded again of the work of Woolcock who so clearly relates social capital to civil society in maximizing effective economic development. Yet economic development is a chimera if preventative health is not valued and actioned.

Technology is transformative of regional, rural, and remote health, particularly preventative health initiatives. Charlton's research demonstrated that early ultrasound of neonatal instability of the hip can be carried out using a battery powered hand-held ultrasound machine in any environment. The pictures gained can be stored and transmitted via WiFi link to specialists for opinion and advice and stored for monitoring of progress over time. This offers an opportunity to address the reported rising rate of late diagnosis of developmental dysplasia of the hip in young children in regional Australia which has been reported in the literature (Williams, Foster, & Cundy, 2012). Such simple, early screening supports the education of parents about optimal care of their infant's hips in a simple video explanation of their infant's unique hip status and offers instant reinforcement of management techniques. This service cannot be provided through the public health service in one region where it is available privately, because it is not available across all parts of regional South Australia. How do we overcome such attitudes to research and development for the betterment of health services?

Expansion of digital citizenship has created a new configuration of universal health care. This must have compound effects on the Australian Health System, with administrative as well as medical and allied health professionals being recruited internationally. Familiarity with Australian conditions and customs is difficult to develop in this group despite cultural awareness training. Specifically, the diverse modes of urbanity, regionality, rurality and remoteness all pose different challenges and diverse needs in the population.

For international professionals, this diversity may be overwhelming. Many are confined to working in areas of need, to fulfil visa requirements as they work towards full registration within Australia. This group of International Medical Graduates (IMGs) are rarely granted the support, mentoring or care that is required (Pascoe, 2019). This situation was clearly enunciated in the multiple deaths in Bundaberg discussed by Dunbar et al. in their book, Deadly Health. (Dunbar & Reddy, 2011). This unhappy episode

in the history of Queensland Health has led to vast improvements in the support for international graduates but there is still a lack of peer support for some of these medical practitioners. Woodruff, in his review of the Bundaberg deaths, highlighted the difficulties of International Medical Graduates in not having familiar experts from whom to seek advice or discussion about cases, where their questioning may be construed as inability to adequately manage the situation.

Professor Dunbar, in his book, warns of the growing concern for modern health services. He cites the international competition for jobs, combined with the workforce shortage and the ever-increasing medical technology and treatment possibilities as a "tidal wave" heading towards all health systems. The circumstances of the Bundaberg Hospital prior to the sad saga of Dr. Jayant Patel, are somewhat like the events which have been witnessed in Mount Gambier. A succession of changes in local administration and an ever-changing workforce has replaced the long-term general practitioners who have been precluded from caring for their patients in the Mount Gambier Hospital. Dr Brian Thiele became medical director of the Bundaberg Hospital in 1994, returning there after working in the United States of America for many years. He was well respected in the community and popular in his administrative duties at the hospital. He was inclusive in his management style, calling upon the social capital of the region in the running of the regional hospital. Over the following five years Dunbar claims that Thiele became increasingly frustrated with "increasingly centralised decisions from Queensland Health" despite a strong focus from management on the assets of the community. The problem escalated as the expertise, professionalism and knowledge within the region was undermined by central management and funding restrictions.

How much do we see this pattern repeating itself through Country Health SA, undermining local decision making and expeditious care? A recent case concerned a young man involved in an accident in the northern part of the Limestone Coast region, who needed to have a CT scan for a head injury. It was deemed necessary for transfer to the Mount Gambier Hospital some 250 kilometres away where such a service was available. Transfer by road ambulance was arranged some eighteen hours after the accident. The young man was in serious pain and confused in his speech. At the time of the accident, he was about the same distance from Adelaide, but protocol dictated that he needed to be transferred to Mount Gambier for assessment.

This road trip by ambulance took over four hours as it required three different ambulances to make the journey. The first ambulance was limited to travelling only as far as Western Flat where he was transferred into a second ambulance for a trip further south as far as Penola. At this point, the second ambulance had reached the end of its territory and he was then transferred into the third ambulance for the remainder of the journey. Thus, six ambulance personnel were involved in this transfer plus the distressed family representatives who were following in their vehicle. The patient arrived at the Mount Gambier Hospital more than twenty hours after the initial head injury which can certainly not be considered best practice for such an injury. He subsequently underwent a CT scan which revealed bruising around the brain and was evacuated via the RFDS to Adelaide, for neurosurgical management some twenty-eight hours after the injury. He remains in hospital in Adelaide.

The vast differences in geography, economics, and climate experienced across Australia are a clear indicator of the differing health policies, requirements, literacies, expectations, and capacities. Still, regionality is poorly recognised in the health system in Australia. There are political and geographical

reasons for this, which in combination with population spread, make an analysis of the health requirements difficult to outline and quantify. It is however abundantly clear that even in the State of South Australia, the service cannot be uniformly structured and funded.

What strategies should be adopted to ensure that all communities require and deserve the best practice health care that is available, tempered and customized by the requirements of regional, rural, and remote populations? Social capital is not a helpful term in making these determinations. The new configurations of infrastructural resilience and sustainable wellbeing may prove powerful and holistic strategies to manage both complexity and diversity. Events from diverse areas of Australia have clearly demonstrated that a "one size fits all" approach does not work. The expertise and regional experience of those who have provided excellent care for their communities in line with community expectation, must be respected and valued for the local and community knowledge that they have amassed over many years. A return to encouraging visiting specialist medical and allied health professionals to join in provision of care closer to home for regional and remote people must be expanded.

A senior rural doctor in considering retirement, expressed extreme sadness that he found it difficult to leave as he felt that he was leaving the local health system in a far worse state than when he joined it some fifty years earlier. He e was unable to ensure that his patients (now to be known as "clients" as decreed by the health system) would have timely access to caring medical advice when needed. In moving to resilience as a governance strategy for regional health and education, it is time for Country Health SA to explore the strength of rural civil society, recognize local expertise and encourage and expand the credibility and credit granted to regional, rural and remote communities. Health inequalities are divisive and reinforce an array of other injustices. Just as urban contexts are not singular, neither is rurality. A diversity of industries, infrastructures, and challenges cluster in these settings. Yet change is possible, and interventions are required. Social media can create and maintain social capital in rural communities (Tiwari, Lane, & Alam, 2019). But in a (post)social capital environment, concrete commitments to preventative health, health literacy and sustainable professionalism are required.

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