A submission to the

Regional Telecommunications Independent Review Committee

By the Pearcey Institute Ltd.

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This submission by the Pearcey Institute specifically addresses the opportunity for a significant uptake of the broadband infrastructure to improve the health of regional and rural communities through better access and utilisation of new technologies in areas like telemedicine and medical knowledge management.

The key to better utilisation of broadband infrastructure in regional and rural Australia, is perhaps tied up in these two statements raised in the Review issues paper:

> **Intro Para 3:** *This review aims to gain a better understanding of how regional Australians use telecommunications services. In particular, it is focused on understanding any **barriers** to using digital technologies faced by people in regional communities and how these can be overcome.*
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> **Question 1 in Appendix 1 - List of Questions:** *What are the **main barriers** to people in regional communities increasing their use of digital technologies and possible solutions for overcoming these barriers?*

In a way, the needs of rural and remote Australians and the manner in which they can benefit from new technologies are no different to the issues that face those in urban areas.

However, the unrealised benefits to the former are probably greater than those already accruing to the latter. The barriers, in fact, are not technology based, rather they are related to providing incentives to the patients and the providers to change their respective behaviours.

For example;

1. Patients are known to drive 4-5 hours to see a specialist, meaning a lost day in travel time alone.
2. The specialist, for instance, may not believe in teleconsultations so is quite happy for the status quo on consultation practice to continue and will charge normal rates for the 30 minute interaction.
3. Telehealth consultations have been very slow to take-off in Australia, although there are some excellent examples State by State of the positive impact that remote consultations, facilitated by technology, have had on health and wellbeing of patients.
4. The innate conservatism of doctors to change their 'face to face' consultations and accept 'virtual consultations' has slowed the necessary transformation process. This behavioural barrier, when combined with restrictive Telehealth consultation guidelines for Medicare rebates (distance criteria and restrictions on which health professionals can participate in the scheme), most likely accounts for a large part of this slow take-off.

5. In most rural communities the medicos that have been in their communities for a long time, may not be up to date with the latest telecommunications, despite the good work of ACCRM and need to be incentivised to embrace the new E- Health technologies.
6. In some instances potential patients are referred on to hospitals as Local GP's may feel they don't have the expertise to deal with the injury/ diagnosis. Telemedicine has been shown and can offer the expertise directly into the GP's surgery.
7. And finally given the current predicament and dire circumstances regarding the drought in NSW & SE QLD, there will be added pressure on local resources and a need to deal with mental health issues in rural communities.

In contrast, the Department of Veterans Affairs in the USA last year provided over 70% of its consultations in the form of telehealth. (DVA runs America's largest integrated health care system, providing care at 1,243 health care facilities, including 172 medical centres and 1,062 outpatient sites of care of varying complexity and serving 9 million enrolled Veterans each year.)

Is it feasible to train and/or encourage the specialist by providing financial incentives to offer the same service to the same patient over say an NBN service? Is it feasible to offer a higher price for the consultation to the patient on the basis that they do not have to leave their office/home/farm etc?

We would posit that there are consumer advocacy groups interested in this area who can elaborate on these scenarios and inform a 'new' approach.

The challenges to implementing a new national innovative digital health care system will be many including, but not limited to, the following:

1. Changes to the payment system currently used for medical consultations and how professionals and the patients are 'compensated' by Medicare and Private Health Insurance
2. Cross agency collaboration where the existing silos have been major barriers to change
3. Patients and professional providers understanding the benefits and opportunities for digital solutions to their own and their families' health issues
4. Providing the skills for both patients and professional providers for using the technology on a regular basis
5. Providing robust business models to accommodate new business practices
6. Ensuring the GPs, the physios, the consultants are adequately incentivised to engage with patients under the new operating model
7. Providing patients and the healthcare funds with new levels of cover that provide telehealth consultations
8. Patients with Chronic conditions should be encouraged to collaborate with the 'Groups of Common Interest' formed to help bridge the gap between the clinical fraternity and their lifestyle through knowledge of what works and what doesn't from those who are mature sufferers

By undertaking such actions there are obvious, maybe even self-evident, economic and productivity gains for all involved in the rural health ecosystem. However, to effect change will require an absolute commitment by the senior executives in the major federal and state agencies whose responsibilities touch any of the groups and individuals impacted by this new and apparently disruptive approach to tele-medicine. The question will be how do you get started, what are the role

models already working and proven, what can we learn from similar challenges in say the US and Canada?

Of course, the pricing of the telecommunications service underpinning all of these new approaches will be a critical determining factor in their successful implementation. The provision of this infrastructure must not be seen as an opportunity for NBN Co to ensure its RoI meets some arbitrary level – this is as important as the provision of quality roads in rural and regional Australia.

We are a rich country and penalising country folks relative to the urban citizens, is unconscionable. In other words, there must be no attempt to raise the wholesale Average Retail per Unit pricing in rural and regional areas so as to allow the government to demonstrate a better return on their NBN investment to-date.

What we do emphasise is that patients/ consumers are the ones who should, and will, drive this agenda. Indeed, all of the 'players' will need to act as facilitators of these changes.[1]

Whilst this a short succinct appraisal of one major issue involving the provision of health services using the national broad band infrastructure, the authors of this paper will gladly make themselves available to meet with any parties who believe this approach might make a difference in this critical service provision area.

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Attachments:

- Pearcey Institute
- Bios on Prof Peter Brooks, Denis Tebbutt, Peter McWilliam and Wayne Fitzsimmons

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[1] Refer paper by Coughlin, Roberts, O'Neill and Brooks "Looking to tomorrow's healthcare today: a participatory health perspective" Internal Medicine Journal 48 (2018)92-96, 2018 Royal Australian College of Physicians

The Pearce Institute Ltd.

The Pearcey Institute operates across the diverse range of activities associated with the contemporary ICT industry throughout Australia. It is closely associated with the Pearcey Foundation established in 1998 to simply promote the ICT industry to Australia and Australians through a broad range of activities (see www.pearcey.org.au)

The key objectives of the Pearcey Institute are as follows:

- To create, facilitate, foster and sustain an innovative, entrepreneurial, fair and productive Australia through research, policy advice and active collaboration across the broad Australian ICT sector. To achieve these goals, it will undertake any or all of the following activities from time to time:
- Conduct and sponsor socio-economic research, facilitate communication, collaboration and diffusion to sustain Australia's competitive position whilst being impacted by disruptive technologies.
- Work in partnership with governments, CSIRO, universities and corporate R&D organisations, to maximise the generation and commercialisation of globally competitive technologies.
- Conduct and sponsor research to identify, promote and advise on optimal models for innovation, research, metrics, management of IP and commercialisation processes.
- Develop and connect networks of researchers and investors comprised of individuals and organisations in an open collaborative manner for more successful commercial outcomes.
- Recommend policy and investment initiatives to government, institutions and industry to achieve these goals
- Conduct events to facilitate and promote the goals of the institute.

Peter M. Brooks AM MD FRACP

Professor Peter Brooks is currently a Professorial Fellow at the Centre for Health Policy- School of Population and Global Health University of Melbourne. He is also the Research "Lead' at Northern Hospital Epping. He established the Centre for On-Line Health at UQ in 2000 and is an Associate investigator in the CRE for Telehealth at UQ. More recently he has developed an interest in health workforce and inter-professional learning. He has recently established the Australian Health Workforce Institute, a joint initiative of The University of Queensland and The University of Melbourne, which is developing an evidence base for Health Workforce policy and innovation. He has a broad understanding of mobile technology advances including simulation and its ability to drive health workforce productivity. He was one of the founding members of OMERACT – outcome measures in rheumatology clinical trials- an international group which has for the last 20 years set the benchmark for the evaluation of therapies in musculoskeletal medicine. The work carried out by OMERACT has led to the development of a number of outcome measures and guideline for the evaluation of treatments for rheumatoid arthritis, osteoarthritis, gout and the use of imaging techniques including X-ray, CT, MRI and ultrasound. More recently he was involved in the establishment of active patient involvement in all OMERACT activities- a very important initiative that has helped to inform the agenda of Patient Related Outcomes (PROs) so important as we engage patients and the community in the health system. In terms of pharmaceutical policy/clinical trials he has been a previous member of the Pharmaceutical Benefits Advisory Committee and has been a member / Chair of Human Ethics committees at the Royal North Shore Hospital Sydney, St Vincent's Hospital Sydney, QIMR and the Northern Hospital, Epping and is currently a member of the Epworth Healthcare Human Research and Ethics Committee.

Denis Tebbutt

Denis is Chairman of the charity Dragon-Claw, a community of common interest for sufferers, their carers and clinical support team for those diagnosed with the hidden condition of Rheumatoid Arthritis, Lupus and Juvenile Idiopathic Arthritis. Denis has recently accepted the position of Chairman of the Pearcey Institute to further the innovation within Australia. He has spent his working lifetime in the technology industries since joining British Petroleum in London. He has been engaged in the transformation of industries across three continents in manufacturing, heavy engineering and the financial services sector before settling in Australia and spending the past fifteen years on the needs of our healthcare sector. In addition to a successful career he has given his time to the development of the Australian Computer Society Foundation, encouraging greater

engagement in the ITC sector for graduates and Tafe students as well has having served for three years as a national director of the Health informatics Society of Australia during which he chaired the 2014 Telehealth National Conference

Peter McWilliam

Peter has a Diploma in Farm Management from Sydney TAFE and was a Voluntary Advisor to Hon. Fran Bailey 1996-2010 in McEwen. Currently he is heavily engaged and committed to the health sector and its development through his work as:

Board Member Northern Health 2013-2019
Committee Chair Primary Care and Population Health, Northern Health
Committee Chair Finance Northern Health
Board Member Northlink

Wayne Fitzsimmons OAM

Wayne is a communications engineer (University of Queensland 1964). He started his professional career at the Aeronautical Research Labs in Fisherman's Bend, joined Fairchild Semiconductor (pioneers of silicon semiconductors and the raison d'être of the term Silicon Valley) and then in 1973 set up the Australian arm of mini-computer company, Data General. Data General took him to the UK in 1980 and to Boston in the USA, in 1983, holding senior executive roles with NASDAQ listed companies, Data General and Banyan Systems. Returning to Australia in 1994, as CEO and Board member of publicly listed Communications company Datacraft Ltd, he had a successful exit from his own IT start-up, OpenDirectory, in 1998. Wayne is currently Chairman of the Pearcey Foundation (www.pearcey.org.au), a national not-for-profit ICT industry group focussed on promoting the ICT sector to the nation. He is a board member of four successful early stage Australian ICT companies – launching his latest Melbourne-based cloud software start-up, Xperior, in early 2016. He was awarded an Order of Australia Medal in the 2018 Queens Birthdays Honours.