

# Universal healthcare in the Philippines and the scope for therapy and rehabilitation

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Universal healthcare in the Philippines and the scope for therapy and Title:

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#### **Abstract**

This discussion paper highlights some of the findings from an international workshop where researchers examined literature relating to universal healthcare in the Philippines. These findings included the complexity of the healthcare system, possible barriers experienced and service coverage, and are explored in relation to rehabilitation which may broaden debate and discussion in this area.

Development of the Filipino healthcare system is outlined and the possible benefits of rehabilitation, including vocational rehabilitation, are examined especially in relation to work-related injuries and wheelchair use. There is a focus on understanding disability as a health, development and human rights issue and the possible benefits of rehabilitation to improve the quality of life for disabled people.

Future research initiatives to confirm the number of people living with disability and the nature of their disability and information relating to the therapy workforce in the Philippines is recommended. This paper may inspire research also relating to the objective of securing universal healthcare in the Philippines with greater consideration of the needs of disabled people and the benefit of rehabilitation.

# **Keywords:**

Universal healthcare, Philippines, disability, rehabilitation, vocational rehabilitation

#### Introduction

This discussion paper highlights some of the findings from an international workshop funded by the British Council's Newton Fund in January 2016 in the Philippines relating to universal healthcare. These findings are considered in relation to therapy and rehabilitation and especially with regard to vocational, or occupational, rehabilitation. There is an increasing unmet need for therapy and rehabilitation worldwide and particularly so in low-middle income countries where the capacity to provide such services is limited or non-existent (World Health Organization [WHO], 2017). The limited evidence base can frustrate the development of health policy which might increase awareness about disability and ways in which to encourage investment in therapy and rehabilitation services (WHO, 2017). The aim of this paper is to raise the profile of therapy and rehabilitation for the whole of the population in low-middle income countries such as the Philippines.

People with a physical disability make up 15% of the world's population, and 20% of the poorest of the poor are considered to be disabled (WHO, 2011). To illustrate the practical dimension of living with disability a discussion regarding the use of wheelchairs is provided to stimulate debate amongst the wider therapy and rehabilitation research community. Similar to Shakespeare (2012) the authors consider *disability* is best understood in relation to health, development and human rights, hence it must be considered as an integral part of universal healthcare. The authors include an occupational therapy lecturer with an interest in rehabilitation for those affected by severe disability, a research fellow with a background in anthropology and public health, and a medical researcher from the Philippines. Some recommendations are provided informed by the authors' reflections on the workshop which may inspire research in this important area of therapy and rehabilitation.

### Background to healthcare in the Philippines

The provision of universal healthcare may be a concept taken for granted in developed economies but in low-middle income countries this is an objective yet to be achieved. The basis to provide universal healthcare is built upon a developed economy providing sufficient wealth and effective health systems so that the healthcare needs of the populace are met. This can be challenging in countries with limited financial resources. The Philippines is an interesting case study for those with a background in global public health but also for therapy professionals with an interest in how to broaden access to therapy and rehabilitation services in low-middle income countries. To understand the Filipino experience some consideration of historical developments during the latter half of the 20<sup>th</sup> century is helpful.

The Philippines has a long history of autocracy which appears to have resulted in a fear of centralisation of power. As a colony of the United States of America, the health system was fully centralised with local leaders rewarded for cooperation (Langran, 2011). This changed following independence with a process of decentralisation beginning in the 1950s and developed further in the 1960s to help establish democracy. According to Langran (2011: 363), in the 1970s, President Ferdinand Marcos "pursued decentralization in name only" but in reality centralised control of state funds. With the overthrow of Marcos in 1986, a greater determination for decentralisation was prioritised by the new democratic government to empower local communities. However, it appears the influence of traditional elite politicians has persisted albeit with some additional powers being given to local politicians (Langran, 2011). Langran (2011) raises the vexed issue of healthcare for certain populations within this background of decentralisation and a need to understand those policies that will work to help improve healthcare planning.

According to Saguil and Ferrer (2014) devolution ushered in a transfer of power from the centre to the region. In terms of health, they describe this as local government becoming increasingly responsible for salaries, remuneration and benefits, resulting in greater ability to design and implement healthcare programmes. To pay for this a complex procedure of internal revenue allotment was implemented, originally devised in order to finance local government to deliver new healthcare services, the process has been criticised as not fit for purpose to meet the needs of local communities (Langran, 2011).

Consecutive Filipino governments have expressed commitment to the principles of the Alma Ata Primary Health Care Declaration signed in 1978 and the objective of primary health care for all, this worthy objective became national policy in 2000 (Paterno, 2013). In order to achieve this, a national health insurance programme (PhilHealth) was initiated in 1995. As a government owned organisation, PhilHealth was mandated to achieve universal healthcare by 2010 and the Filipino administration has previously expressed commitment to achieve this by 2016 (Paterno, 2013).

The extent to which universal healthcare is being achieved was the focal point for exploration by researchers from the United Kingdom (UK) and the Philippines at a workshop hosted by the Ateneo de Manila University in the Philippines in January 2016 where 99 published and unpublished research articles, reports and discussion documents were examined. The typical journey for a Filipino through the complex healthcare system was outlined and some of the barriers that could be experienced included out-of-pocket expenses relating to lost income, transportation, the cost of medication and professional fees (Wong et al, 2016). The extent to which the population is covered is also questionable. According to the Philippine Health Insurance Corporation 85% of the population are covered by PhilHealth (Ulep, 2015). However, it appears, that certain groups and individuals are not covered; the poor are not

accessing services as might be expected and the current focus on inpatient care neglects primary care (Dayrit et al, 2016).

Workshop recommendations included to take a systems approach to ensure the poor can access adequate and affordable healthcare, to combat the high cost of medication, and to strengthen primary healthcare (Hanson et al, 2016). Research was recommended to establish if healthcare services are appropriate to meet the needs of all; to identify unmet needs and find out what are the reasons for these; to establish as to whether healthcare services are accessible, affordable and acceptable; are the right type and amount of service providers being produced; what would incentivise provision of healthcare in the geographically isolated and disadvantaged areas; how to assure healthcare quality at all levels and; what can be learnt from best practice across the Philippines (Legido-Quigley, 2016).

Absent from the workshop however, and the papers selected, were issues relating to therapy and rehabilitation. Through discussion it appeared to the authors that the needs of those who require rehabilitation were not adequately being addressed, although there has been some allowance for the consideration of funding rehabilitation in the revised rules for PhilHealth applied since 2013 (PhilHealth, 2013). The legal basis to extend services for disabled people appears to be improving however with the ratification of new legislation which will expand the range of benefits for people with disabilities (Government of the Philippines, 2015).

According to the WHO (2011) people with disabilities can be denied equal access to healthcare, employment, education, and political participation and their dignity can be compromised as a result. It appears also that people with disabilities are more likely to be unemployed and earn less when employed, making it difficult to benefit from development and escape poverty (WHO, 2011). The authors therefore consider it important to understand the development of therapy and rehabilitation in the Philippines in relation to the link

between disability, poverty and human rights. It is within this context that we now consider the issue of therapy and rehabilitation in the Philippines.

## Therapy and rehabilitation services in the Filipino context

Therapy professionals may be curious as to what universal healthcare means in relation to rehabilitation in the Philippines. According to Evans et al (2013: 546) "Universal health coverage is the goal that all people obtain the health services they need without risking financial hardship from unaffordable out-of-pocket payments. It involves coverage with good health services – from health promotion to prevention, treatment, rehabilitation and palliation – as well as coverage with a form of financial risk protection". Evans et al (2013) highlight however that many countries are far from achieving universal healthcare. It is reasonable to understand that countries such as the Philippines may have priorities other than rehabilitation, including the development of immunisation programmes and midwifery services in rural communities to help reduce child and maternal mortality for example, however an understanding of the merits of rehabilitation may be helpful to broaden debate relating to this topic.

The Philippines appears to be progressing reasonably well to achieve the Millennium Development Goals relating to reducing infant and under-five mortality, increasing tuberculosis detection and cure rates, and increasing access to clean water (National Economic Development Authority, 2014). The adoption also of the Sustainable Development Goals in September 2015 building upon the progress of the Millennium Development Goals are encouraging (United Nations, 2015). This is good news, however poor achievement is evident in relation to maternal mortality, access to reproductive health, and HIV/AIDS services (National Economic Development Authority, 2014). Interestingly, issues relating to

therapy and rehabilitation form only a minor part of the Millennium Development Goals but there do appear to be some initiatives to foster the development of community based rehabilitation services by government bodies (National Council on Disability Affairs, 2016). This background of limited primary healthcare services in the Philippines provides some explanation as to why rehabilitation is given a low priority. There are estimated to be eight million people with disabilities in the Philippines with limited therapy options outside of the private sector (Olavides-Soriano et al, 2011). The WHO (2017) however recognises the importance of affordable rehabilitation to ensure healthy lives and promote well-being as such services support individuals to remain independent, participate in education, be economically active and live meaningful lives. To throw some light on the possible benefits of investing in therapy and rehabilitation in the Philippines the needs of people with disabilities are now considered.

## Vocational rehabilitation in the Philippines

Occupational therapists in the UK for many years have understood the importance of productivity in relation to condition management in order to live healthy lives and have been prominent in the delivery of such services (Reagon, 2011). Occupational therapists working in this field recognise that work not only fosters financial stability and independence but can contribute towards self-respect, social inclusion and wellbeing (Sheppard and Frost, 2016). Vocational, or occupational, rehabilitation following an injury or period of illness can increase the likelihood of being able to return to gainful employment. This might be particularly important in low-middle income countries where social security is limited. A definition of vocational rehabilitation has been provided by the International Labour Organization (1998: Appendix I, Part I, Article I, Point 2) as "being to enable a disabled

person to secure, retain and advance in suitable employment and thereby further such person's integration or reintegration into society". According to Fisher (2012) occupational therapists are well placed to address these factors.

According to the WHO (2002) disability relates to the interaction between the individual and personal and environmental factors such as negative attitudes, inaccessible transportation and public buildings, and limited social support. Disability, therefore, is a complex phenomenon, reflecting the interaction between the features of a person's body, such as amputation or visual impairment, and features of the society in which he or she lives. It would be reasonable to argue therefore that the difficulties faced by people with disabilities require interventions to remove environmental and social barriers as well as physical rehabilitation.

In the Philippines vocational rehabilitation falls under the National Occupational Safety and Health of the Department of Labour and Employment and the National Council for the Welfare of Disabled Persons. There are few studies relating to these bodies exploring the benefit of therapy and rehabilitation; nonetheless evidence from elsewhere can help guide research initiatives. For example, Dunstan and Covic (2006) consider the biopsychosocial model in relation to long-term work-injury disability in Australia. Injured workers they argue cannot rely on traditional interventions as these become ineffective in supporting people back to work but that rehabilitation based on a biopsychosocial approach can deliver promising results. They state "The first and most vital step is to recognise the need to assess, and if necessary address, psychological and social-occupational-environmental issues, as well as physical factors, in the rehabilitation of all physically injured workers" (Dunstan and Covic: 74).

Dunstan and Covic's (2006) comments are relevant for those unable to work in low-middle income countries as they highlight the link between physical factors, such as amputation, and

social factors such as reduced income which may be a particular problem in countries with limited welfare protection. Such employees will need to adjust and revisit their own views regarding personal aspiration and ambition and may rely on family for support. The theoretical framework in which to consider treatment for work-related injury, or vocational rehabilitation, and any possibility of returning to work for those affected by disability is important as this provides structure in which to plan and provide rehabilitation services (Langman, 2012).

At present vocational rehabilitation to address work-related injuries in the Philippines are provided by institutions such as training centres, in enterprises such as private companies and community based in *barangays* (or villages); however only 2% of people with a disability have access to rehabilitation (Olavides-Soriano et al, 2011). According to Olavides-Soriano et al (2011) occupational rehabilitation in the Philippines does not differentiate between people with disabilities in general and injured workers and the service therefore focusses on mortality and sick leave rather than the physical, psychological and social aspects of daily life. They argue for an examination of the effectiveness of occupational rehabilitation in the Philippines which could lead to the provision of a systematic understanding, generation and mandatory reporting of data which would promote the delivery of such services.

Regarding the use of wheelchairs, it is unfortunate that there is little data or research relating to their provision or use in the Philippines. However the growing body of evidence in developed countries is informative and could guide the design of research studies in the Philippines so as to inform the cost-effective delivery of wheelchairs to assist injured workers to return to being economically productive. May and Rugg (2010), for example, in the UK, responded to the lack of evidence relating to wheelchair users' perspectives of powered mobility and their findings suggest that powered mobility increases independence and leads to positive psychological changes. Similarly, in Canada, Rousseau-Harrison et al (2012)

explored the perceived impact in users' daily activities and social roles following the acquisition of a manual or powered wheelchair. They identified themes which may be relevant also for Filipino society such as; changes in daily activities, expectations not being met, impact on social roles, and emotional changes.

In Denmark, Rossen et al (2012) explored the everyday life of electric wheelchair users. Their sample consisted of five men, three of whom had experienced sudden trauma and a major change to lifestyle following spinal cord injury; and four women, three of whom were living with multiple sclerosis and whose level of disability had gradually increased over time. Themes identified included the functionality of the wheelchair, the wheelchair as an extension of the body, the wheelchair and social life, and the wheelchair and identity issues. The implications for rehabilitation, according to this study, are that all levels of occupation and identity are influenced by using a wheelchair which functions as an extension to the user's body, that accessible environments are important, and that practitioners should ensure assessment embraces all levels of the wheelchair user's occupation (Rossen et al, 2012). Again, such findings could be explored in the context of the Filipino ambition to secure universal healthcare, with a much deeper consideration of the value of therapy and rehabilitation and ways in which to broaden these services across the country.

# Universal healthcare and the provision of therapy and rehabilitation

This discussion paper is timely as the number of people with disability continues to rise in the Philippines. According to the Philippine Statistics Authority (2013) in 2000 there were 935,551 disabled people which has increased to 1,443,000 in 2010. In terms of age distribution almost 60% are from the 15-64 age range, so these are largely working age individuals. It appears that there are many conditions where therapy and rehabilitation could

make a significant contribution to improving the lives of those affected; these include low back pain, stroke, ischemic heart disease, diabetes, road Injuries, neck pain, falls, and other musculoskeletal disorders (Institute for Health Metrics and Evaluation, 2010). This raises questions as to current numbers living with disability, their socioeconomic status and ability to access a benefits package which includes rehabilitation. The WHO (2011) highlight the shortcomings of inadequate data and policies in relation to rehabilitation across the world and encourage all countries to invest in rehabilitation capacity.

If an appropriate benefits package allowing for rehabilitation at both the clinical and community setting is to be provided across the Philippines then consideration as to the availability and supply of skilled therapists is necessary. In 2015, 412 physiotherapists and 54 occupational therapists received their licence to practice (Professional Regulation Commission [PRC], 2015), whether this is sufficient to meet the needs of almost 1.5 million disabled people is unknown. Data is limited in relation to the number of therapists in the Philippines and where they are practising in terms of urban or rural locations and whether this is in the private or public sector. In order to identify gaps to ultimately strengthen services it would be helpful to establish the number of therapists practicing in such diverse settings as physical rehabilitation, mental health, and special needs education. It appears that there are 52 higher education institutions offering undergraduate education in physiotherapy and 19 offering occupational therapy (Philippines Universities and Colleges Guide, 2017). These professions are regulated in the Philippines by the PRC which requires therapists to be registered and for therapy to be prescribed by a physician (PRC, 2017). It may be helpful also to better understand the structure as to how rehabilitation services work in relation to the gatekeeping role of physicians and any possible barriers to therapy as a result of this. The authors' view is that data in this regard would be beneficial for planners so as to improve the

possibility of providing affordable, accessible, and good quality therapy and rehabilitation services for the whole population.

In recent years the delivery of therapy and rehabilitation services has primarily been through community based rehabilitation programmes, a model for which has been in place since 1989. Although there are limited studies relating to the impact of therapy and rehabilitation services in the Philippines there is some evidence to highlight the very real benefits that are possible. Magallona and Datangel (2011: 48) found that 67% of participants in a community rehabilitation programme had achieved what they described as a "remarkable improvement" within less than a year of therapy. For those who participated in the programme for more than one year but less than two, remarkable clinical improvements were noted in 73% of participants. These are encouraging findings and demonstrate the potential positive impact of rehabilitation. The WHO (2011) has called for more research in developing countries to better understand the benefits of health programmes for people with disabilities including rehabilitation.

It is well known that disabled people experience catastrophic health expenditure in countries without adequate safety nets (WHO, 2011). It is important to understand that disabled people often have care needs over and above the non-disabled population. For example, a person with a spinal cord injury spending substantial periods of time in a wheelchair may be more susceptible to pressure sores or urinary tract infections (Marge, 2008). It is worthy to note also, that life expectancy post-injury for such a person in a low income country is only two years, compared with near average longevity in high income countries (Gosselin and Coppotelli, 2005). This is a disturbing statistic and raises questions as to the availability of therapy and rehabilitation. Yet the Convention on the Rights of Persons with Disabilities highlights the importance of both health and rehabilitation (United Nations, 2006).

To the best of the authors' knowledge there has been no study assessing the implementation of relevant legislation and policy in relation to making available therapy and rehabilitation services across the Philippines. Developments in healthcare services have resulted in devolution of responsibility and financial management to a local government level; whether this has adequately made available therapy and rehabilitation is unknown. The above literature is helpful to provide a therapy research context in which to consider universal healthcare and the current position of rehabilitation in the Philippines. These papers illustrate some of the main issues relating to wheelchair provision in countries where there are established therapy and rehabilitation services. As there is a dearth of similar studies in the Philippines the authors' recommendation is that research is necessary in order to establish the extent and detail of rehabilitation across the country. The Filipino government has recently expressed its want to prioritise the inclusion of rehabilitation in secondary and tertiary health facilities and to integrate rehabilitation services in primary care packages (WHO, 2017). Inkeeping with these priorities and the WHO's Rehabilitation 2030 'Call for Action' (WHO, 2017) the authors encourage practitioners and policy-makers to recognise and respond to the increasing need for therapy and rehabilitation services in countries like the Philippines and recommend research which will ultimately strengthen service delivery for all. A greater understanding as to those who access rehabilitation, and those who do not, may provide useful data to plan more effective services.

Conclusion

undoubtedly formidable but improvements in relation to the recently adopted development agenda in the form of Sustainable Development Goals, which build upon the progress of the Millennium Development Goals are encouraging. It is understandable as to why Filipino healthcare objectives relate to reducing mortality rates and improving sanitation but the authors of this paper argue that evidence of the benefits of therapy and rehabilitation

The challenges facing the Philippines in order to deliver on the Alma Ata Declaration are

elsewhere could encourage healthcare planners to invest in this area also, particularly in

relation to vocational rehabilitation which is so important in countries with limited or no

welfare systems. Vocational rehabilitation could be considered as an integral aspect of an

effective healthcare system as such services play a vital role in addressing work-related

disability and at the same time improve the active involvement of individuals to contribute to

society in general and workforce in particular. In the context of the Philippines, initial

research priorities could include studies to confirm the number of people living with

disability and the nature of their disability as well as detail regarding the therapy and

rehabilitation workforce. This paper was written to stimulate discussion in the therapy and

rehabilitation research community as it is the authors' view that access to therapies is

paramount in order to support people with disabilities to live better lives.

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#### References

Dayrit M, Boyle P, Calonia L, et al (2016) Population Coverage. Presented at: British

Council Newton Fund Researcher Links Workshop, 'Are Current Research Efforts on

Universal Health Care (UHC) in the Philippines Showing Evidence for Achieving the Goal?

A Multidisciplinary Workshop for Early-Career Researchers'; 11-14 January 2016; Manila,

Philippines

Dunstan DA, Covic T (2006) Compensable work disability management: a literature review of biopsychosocial perspectives. Aust Occup Ther J 53: 67-77

Evans DB, Hsu J, Boerma T (2013) Universal health coverage and universal access. World Health Organization Bulletin 91:546-546A

Fisher T (2012) Psychosocial assessment of the worker. In: Braveman B, Page JJ (eds) Work: Promoting Participation and Productivity through Occupational Therapy. Davis Company, Philadelphia: 246-262

Gosselin RA, Coppotelli C (2005) A follow up study of patients with spinal cord injury in Sierre Leone. Int Orthop 29: 330-332

Government of the Philippines (2015) Republic Act 10754.

www.gov.ph/downloads/2016/03mar/20160323-RA-10754-BSA.pdf (accessed 21 February 2017)

Hanson K, Antonio C, Bhanbhro S, et al (2016) Enhancing Cost Coverage. Presented at:
British Council Newton Fund Researcher Links Workshop, 'Are Current Research Efforts on
Universal Health Care (UHC) in the Philippines Showing Evidence for Achieving the Goal?
A Multidisciplinary Workshop for Early-Career Researchers'; 11-14 January 2016; Manila,
Philippines

Institute for Health Metrics and Evaluation (2010) Global Burden of Disease Study 2010: Philippines Country Profile. www.healthdata.org/philippines (accessed 21 February 2017)

International Labour Organization (1998) Vocational rehabilitation and employment of disabled persons. Report of the Committee of Experts on the Application of Conventions and Recommendations. International Labour Organization, Geneva

Langman C (2012) Introduction to Vocational Rehabilitation: Policies, Practices and Skills.

Routledge, London

Langran IV (2011) Decentralization, democratization, and health: the Philippine experiment.

J Asian Afr Stud 46(4): 361–374

Legido-Quigley H, Co PA, Delarmente B, et al (2016) Service Coverage. Presented at:

British Council Newton Fund Researcher Links Workshop, 'Are Current Research Efforts on
Universal Health Care (UHC) in the Philippines Showing Evidence for Achieving the Goal?

A Multidisciplinary Workshop for Early-Career Researchers'; 11-14 January 2016; Manila,
Philippines

Magallona LM, Datangel JP (2011) The community based rehabilitation programme of the University of the Philippines Manila, College of Allied Medical Professions. Disability, CBR and Inclusive Development 22(3): 39-61

Marge M (2008) Secondary conditions revisited: examining the expansion of the original concept and definition. Disabil Health J 1: 67-70

May M, Rugg S (2010) Electrically powered indoor/outdoor wheelchairs: recipients' views of their effects on occupational performance and quality of life. Br J Occup Ther 73(1): 2-12

National Council on Disability Affairs (2016) National Consultation on the Proposed IRR of RA No. 10754 Held. www.ncda.gov.ph/2016/09/national-consultation-on-the-proposed-irr-of-ra-no-10754-held/ (accessed 21 February 2017)

National Economic and Development Authority (2014) The Philippines Fifth Progress

Report: Millennium Development Goals. National Economic and Development Authority,

Manila

Olavides-Soriano ME, Ampo E, Escorpizo R (2011) Occupational rehabilitation policy and practice in the Philippines: initiatives and challenges. J Occup Rehabil 21: S62-S68

Paterno RPP (2013) The future of universal health coverage: a Philippine perspective. Glob Health Gov 4(2): 32-52

PhilHealth (2013) National Health Insurance Act. 2013.

www.philhealth.gov.ph/about\_us/irr\_nhia2013.pdf (accessed 21 February 2017)

Philippine Statistics Authority (2013) Persons with Disability in the Philippines (results from the 2010 Census). www.psa.gov.ph/content/persons-disability-philippines-results-2010-census (accessed 21 February 2017)

Philippines Universities and Colleges Guide (2017) http://www.finduniversity.ph/ (accessed 4 May 2017)

Professional Regulation Commission (2017) Board of Physical and Occupational Therapy. http://www.prc.gov.ph/prb/?id=37&content=215 (accessed 4 May 2017)

Professional Regulation Commission (2015) Results of the Physical and Occupational Therapy Examination, February 2015. www.gov.ph/2015/02/06/results-of-the-physical-and-occupational-therapy-examination-february-2015/ (accessed 21 February 2017)

Reagon C (2011) The changing role of occupational therapy in vocational rehabilitation: reflections on an evaluation of Condition Management Programmes. Br J Occup Ther 74(6): 309-311.

Rossen CB, Sørensen B, Jochumsen BW, Wind G 2012) Everyday life for users of electric wheelchairs – a qualitative interview study. Disabil Rehabil Assist Technol 7(5): 399-407 Rousseau-Harrison K, Rochette A, Routhier F, Dessureault D, Thibault F, Cote O (2012) Perceived impacts of a first wheelchair on social participation. Disabil Rehabil Assist Technol 7(1): 37-44

Saguil DA, Ferrer OP (2014) Devolution Effects and Impacts on Health Service Delivery.

University of the Philippines Public Administration Research and Extension Services

Foundation, Inc. Manila

Shakespeare T (2012) Commentaries: developed countries' responses to the World Report on Disability, still a health issue. Disabil Health J 5: 129-131

Sheppard DM, Frost D (2016) A new vocational rehabilitation service delivery model addressing long-term sickness absence. Br J Occup Ther 79(11): 677-681

Ulep VGT (2015) Philippine Health Insurance Corporation: benefit expansion, enhancement and monitoring strategies. HSMR

United Nations (2015) Philippines. Sustainable development knowledge platform. https://sustainabledevelopment.un.org/hlpf/2016/philippines (accessed 21 February 2017)

http://www.un.org/disabilities/documents/convention/convoptprot-e.pdf (accessed 21 February 2017)

United Nations (2006) Convention on the Rights of Persons with Disabilities.

Wong G, Clarke J, Gavino N, et al (2016) Juan's Journey. Presented at: British Council Newton Fund Researcher Links Workshop, 'Are Current Research Efforts on Universal Health Care (UHC) in the Philippines Showing Evidence for Achieving the Goal? A

Multidisciplinary Workshop for Early-Career Researchers'; 11-14 January 2016; Manila, Philippines

World Health Organization (2017) Rehabilitation 2030: A Call for Action.

http://www.who.int/disabilities/care/rehab-2030/en/ (accessed 4 May 2017)

World Health Organization (2011) World Report on Disability. World Health Organization,

Geneva

World Health Organization (2002) Towards a Common Language for Functioning, Disability and Health. World Health Organization, Geneva