2019 N20 amendment to the 2018 N20 Resolution

Subcommittee 1 and 2: Global/International Brain Initiatives and Neurological Disease:
(Harmonization of Already Existing Brain Initiatives and Advocacy for Creating New Initiatives Across the G20)

Moderators: **Vicky Yamamoto** (SBMT/BMF), **Kuldip Sidhu**
(Australian Brain Initiative), **Christoph Ebell** (SBMT), **Harry Kloor** (BMF)

Participants: Dr. Dawn Eliashiv, Dr. Nevzad Tarhan, Ms Kari Shapero, Ms. Fraya Ostapovich, Dr. Ted Berger, Dr. Kuldip Sidhu, Dr. Kiran Sidhu, Dr. Harry Kloor, Mr. Serdar Karagoz. Dr. Babak Kateb. Two more guests (one from the Turkish delegates and one from a registrant via NASS).

Main Hall, 10th Floor. Thursday 6-27-2019

Recommendation for G20 nations to harmonize clinical trials, IRBs, initiatives in order to fast track introduction of therapeutics and diagnostics.

The panel will also discuss how new technologies could reduce the cost of healthcare and increase efficiency of the healthcare delivery globally.

Participants: All N20/G20 conference participants and delegates are welcome to participate.

1. Implementation shall include legislative public campaigns to facilitate innovation in brain (both neurological and neuropsychiatric) and spine (both cord and column) disorders. We urge that sufficient resources to be allocated as to address growing health burden of brain/spine disorders. Global campaigns using innovative technologies to curb the economic burden. Investment in innovative technologies will reduce the current large cost to global economy.
2. Efficient delivery of care and faster translation of breakthrough technologies will increase efficiency and decrease financial burdens. (add cost-effective)
3. Generate a uniform G20 brain initiative: we urge the G20 to involve national societies, non-profits, NGOs in order to develop a unified policy.

adjusted models estimated mean annual per patient direct and indirect costs attributable to CLBP to be ¥1,820,297 ($15,239 or €12,551) and ¥1,479,899 ($12,389 or €10,203), respectively, with the majority of direct costs related to hospital expenses (¥1,584,759, which is equivalent to $13,267 and €10,927). In estimating the economic impact of CLBP on society, the CLBP respondents were estimated to include 1,508,524 individuals when extrapolated to the Japanese population (815,461 of them employed). Ultimately, this represented approximately ¥1.2 trillion ($10 billion and €8.3 billion) per year in lost productivity at the time of this study.

Accurate data of cost is not available for low and middle countries in the rest of the world. Low back pain is common from adolescent to older age and becoming increasingly debilitating with age if present.

At the N20/G20 summit the following recommendations were drafted for the G20 Members and the Sherpas in Osaka Japan June 27 and 28 2019 to prevent low back pain and to prevent disability from low back pain, the number 1 cause of disability worldwide (Global Burden of Diseases)

We recommend that the following evidence-based actions be considered to limit the burden of disability related to disorders affecting the spine and the brain:

Public health and prevention of back pain

1. Governments and public health authorities should promote physical activity/exercise and education for all to prevent back pain (community education). The physical activity must be adapted to the age, environment and follow clinical guidelines for exercise. Government should provide an environment to facilitate exercise. The community environment such as green spaces or facilities to carry out physical activity or exercise must be provided.
2. Governments and public health authorities should promote exercise for brain and spine health. Health care systems should ensure patients have access to supervised exercise programs by qualified trained health professionals for the treatment of back pain.
3. Governments and health authorities should promote the development of a qualified community-based rehabilitation workforce to enhance physical activity for spine wellbeing.
4. Implement work and road safety standards and improve emergency response systems.

Treatment of low back pain (primary, secondary and tertiary care)

5. Governments should actively engage in supporting public health campaigns that promote being active, exercise and education about the causes, course and cost-effective evidence-based treatments for back pain.
6. Imaging of the spine within the first 3 months is not recommended for common low back pain without neurological signs and symptoms.
7. Opioids should only be used according to the Centre for Disease Control (CDC) guidelines

4. Improving access to care with predictive analytics and better data collection and dissemination.
5. The committee recommends integration of the techniques to include: advanced diagnostics and therapeutics such as cellular/gene therapy, machine learning, big data, AI, biomimetic prosthetic systems, in-silico modeling, precision/personalized medicine and other technologies with current preventive and therapeutics protocols.
6. Brain and spine health and fitness: educate patients about exercise and strongly encourage physicians to prescribe appropriate exercise as a therapy in conjunction with current treatments. This will contribute to the prevention of neurological disorders, reduction of co-morbidity, as well as improvement of mental and neuro-psychiatric health.

Subcommittee 3: Spine Disorders

Moderators: Eric Muelbauer (MJ, CAE NGO, USA), Margareta Nordin (Dr. Med. Sci., PT Rehabilitation, France) Pierre Côté (Dr. Chir., PhD Epidemiologist, Canada). Members: Aaron Filler (MD, PhD, JD Surgeon, USA), Paul Hodges (PhD, FAA, PT Basic Science, Australia), Hani Mhaidli (MD, PhD Spine surgeon, Spain), Daniel Sipple (DO, Rehabilitation), Tariq Sohail (MD, Spine surgeon, Pakistan), Jeffrey Wang (MD, PhD, Spine surgeon, USA).

Draft Recommendations for Sherpas (V3_June 27, 2019)

Introduction

Spine treatment is a part of a $2.2 trillion healthcare industry in the US. The Agency of Health Report and Quality reports they represented up to 3% of total medical expenditures and were high in the US in 2007. The *Journal of The American Medical Association* says that low back pain (alone) accounted for 2% of all doctor visits in 2005. Low back pain cost is about 2-6% of GDP in Western European Countries, USA and Canada. Low back pain is common, about 90% of the population experience it and about 1 of 3 individuals become chronic with disability. It is the leading cause of disability internationally across all conditions. The N20/G20 took place in Osaka June 28-29, 2019, an example from Japan is chosen for cost: CLBP patients reported significantly lower HRQoL relative to matched controls. Age- and sex-

8. We recommend against the use of spine surgery in the absence of evidence-based indications for effectiveness.
9. Evidence-based guidelines should be developed to screen patients who may benefit from spine surgery.
10. Governments, health authorities and civil societies should educate the public about the causes, course and cost-effective evidence-based treatments for back pain.
11. Governments and health authorities should develop health policies informed by valid country-specific data and develop systems to collect data if they do not exist.
12. All new spine interventions (surgical and non-surgical) should be evaluated for their effectiveness and cost-effectiveness before implementation in health systems.
13. Relevant providers of spine care should be involved in the development of evidence-based, cost-effective policies for management with spinal disorders.
14. We recommend against the use of ineffective interventions and unnecessary investigations.
15. Most patients with spinal disorders should be managed in primary care settings instead of secondary or tertiary health care settings or emergency rooms.
16. We suggest that long acting non-opioids be used to lower surgical cost in patients who require spine surgery.

Elderly population in long term facilities

17. Specific programs including activation and physical activity for elderly individuals living in long term facilities need to be developed for maintaining activity and wellbeing

June 28, 2019

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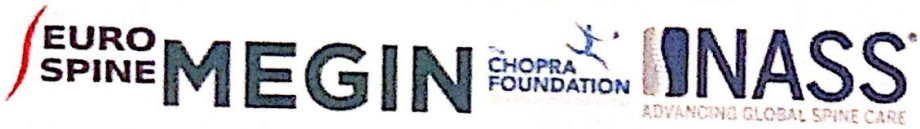

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