Abstracts from the 5th International Primary Care Respiratory Group (IPCRG) Scientific Meeting

Domus Medica, Ljubljana 17th -18th May 2017

IMPLEMENTATION SCIENCE/SERVICE DEVELOPMENT ABSTRACTS

IS01. Breaking down barriers for our patients with Chronic Respiratory Diseases (CRD)

Radmila Ristovska[1 3], Katarina Stavrikj[2 3], Gabriela Gulevska[3], Gordana Kiteva Trencevska[2], Valentina Risteska Nejasmic[3], Vaska Gavrilova[3], Dragan Gjorgjievski[3]
[1]PZU "Dr Radmila Ristovska", Skopje, Macedonia, [2]Medical Faculty of Saints Cyril and Methodius University of Skopje, Macedonia, [3]Association of Family Medicine Specialists - Respiratory Group, Macedonia.

Brief Outline of Context: Our overall goal is to enable cost-effective management of respiratory diseases.

Brief Outline of What Change you Planned to Make: The specific aims of the proposed research are: (1) to empower primary care physicians for complete implementation of protocols and evidence-based guidelines, (2) to establish positive collaboration between primary care and respiratory specialists, (3) to set acceptable guidelines for diagnosis, treatment, and follow-up and agree on indications for referral to a specialist respiratory clinic[1 2 3].

Assessment of Existing Situation and Analysis of its Causes: Respiratory diseases in the Republic of Macedonia have a high prevalence and morbidity. Management of these diseases by practicing primary care clinicians (especially chronic), is extremely limited by generic drug list and limits in referral to respiratory specialists. Despite these limits, it seems that the number of referrals to secondary and tertiary care are still high, which is not cost effective, either to the health system, or to the patients (national referral system, HIF). The reasons for this are different (malfunctioning of the health care system: generic drug list, limited investigations, lack of knowledge of primary care clinicians etc.).[4]

Strategy for Change: AFMS – Respiratory group is planning to invite representatives from secondary and tertiary care, through their respiratory societies in order to agree on diagnostic, treatment and follow-up pathways, and establish referral criteria for respiratory diseases [5 6 7 8]. Initially we aim to focus on asthma, COPD, lung cancer, pneumonia, pulmonary embolism and obstructive sleep apnoea. In a second approach we will include other rarer respiratory conditions such as bronchiectasis, lung fibrosis, pneumothorax, sarcoidosis and tuberculosis.

Measurement of Improvement: Reduction in hospital admissions.

Effects of Change: Improving service integration through the advancement of optimal evidence-based pathways of care, clear role differentiation and lead accountability.

Lessons Learnt: Effective communication between primary, secondary and tertiary care.

Expected Outcomes: We hope that results of this project will be used by service planners and developers, clinicians in primary care, respiratory clinicians.

Declaration of Interest: None

Corresponding Author: Radmila Ristovska Email: rristovska@hotmail.com

References:

1. Упатства за практикување на медицина заснована на докази - Пулмологија
   http://zdravstvo.gov.mk/pulmologija_update/
2. British Thoracic Society, https://www.brit-thoracic.org.uk/standards-of-care/guidelines/, Last visited on 28.02.2017
3. The Canadian Respiratory Guidelines (CRGC) Site, available at http://www.respiratoryguidelines.ca/, Last visited on 28.02.2017
4. ДИЈАГНОСТИЧКО СРОДНИ ГРУПИ
   http://fzo.org.mk/WBStorage/Files/Godisen%20izvestaj%20za%20DRG%202015.pd
5. A review of national guidelines for management of COPD in Europe, available at https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4733567/, Last visited on 28.02.2017

6. RESPIRATORY REFERRAL RECOMMENDATIONS, available at http://www.gp.health.wa.gov.au/cpac/speciality/docs/REFREC022.pdf, Last visited on 28.02.2017
7. REFERRAL GUIDELINES: RESPIRATORY MEDICINE & SLEEP DISORDERS, available at https://www.alfredhealth.org.au/contents/resources/referral-guidelines/Respiratory-Medicine-Sleep-Disorders-Referral-Guidelines.pdf, Last visited on 28.02.2017

1. BTS statement on criteria for specialist referral, admission, discharge and follow-up for adults with respiratory disease, available at http://thorax.bmj.com/content/63/Suppl_1/i1, Last visited on 28.02.2017
2. Statements, Guidelines & Reports, available at https://www.thoracic.org/statements/, Last visited on 28.02.2017

IS02. De-implementing inappropriate inhaled corticosteroids use in Dutch COPD patients in primary care: perceived facilitators and barriers from focus groups in patients and health care providers

Janwillem Kocks[1], Corina de Jong[1], Tjard Schermer[2], Roland Riemersma[1], Ebian JP Brill[3], Maarten van den Berge[1], Thys van der Molen[1], Job FM van Boven[1]
[1]University Medical Center Groningen, Netherlands, [2]Radboud University Medical Center, Netherlands, [3]Apothekersgroep Groningen, Netherlands

Brief outline of context: In the Netherlands around 30% of patients with COPD that use inhaled corticosteroids (ICS) probably have no good indication to have them prescribed. Recent Dutch and international guidelines advice ICS prescription only in COPD patients with more than two exacerbations and discontinue in patients that are stable for more than three years or without exacerbations.
A large program was initiated by the Dutch government to develop successful de-implementation methods for "might not be needed care". One of the eight projects is our "Stop unnecessary ICS use in COPD" project.

The project aims to reduce the proportion of COPD patients who use ICS by 10% by 1. Education within the regular "Pharmacotherapy meeting" between local GPs and pharmacists and 2. Providing GPs with a flow chart to decide if the patient can safely stop their ICS. For each patient >40 years who used ICS and had not received >2 courses of prednisolone in the last year, a printed page including name will be handed over from the pharmacist to the GP during the meeting.

This abstract reports on the initial perceived barriers and facilitators mentioned in two focus groups with COPD patients and the first with health care providers (GPs and pharmacists).

Results: Patients suggested the following:

- Facilitators
    - Contact patients actively because of new insights, if they use something not needed, they want to know.
    - Important role for the nurse, they have time and know the patient
    - People want to taper the medication instead of stopping abruptly
    - Have the ICS available at home for if they start feeling bad after stopping.
    - Regular check when stopping, first call no later than 3 weeks after stopping.
- Barriers
    - Scepticism: 'it probably has to do with cost savings'; explain it will reduce costs, but also potential negative effects.
    - If the pulmonary physician started it, why would the GP nurse stop it?

Health care providers suggested:

- Facilitators
    - The nurse has more time, so she will need to do this.
    - Make it part of the regular (annual) review, that will save time
    - Honestly explain what it is about
        - Explain possible side effects, and also discuss unrelated perceived side effects
        - Cost saving is part of the goal, but mainly improving treatment
        - Lung function will not improve by ICS
    - The availability of combination of long acting medication for if symptoms increase.
- Barriers
    - If medication is not available in similar devices
    - Monitor the results (will add extra time/consultations)
    - Not to stop in winter time

Use in the de-implementation: The information from these focus groups helped us to draft a "Frequently Asked Question" leaflet to be used by the nurses and as patient information to facilitate the discussion between the patient and health care professional in withdrawing ICS in COPD patients who are unlikely to benefit from their use.

Declaration of Interest: This study was supported by The Netherlands Organisation for Health Research and Development grant 839201002

Corresponding Author: Janwillem Kocks Email: j.w.h.kocks@umcg.nl

IS03. Dutch health care providers' perspectives on inhaler technique: an Inhaler Research Workgroup (IRW)study

Esther Metting[1], Vera Otermann[1], Hester Hoving[1], Paul Hagedoorn[1], Siebrig Schokker[1], Ellen van Heijst[2], Titia Klemmeier[3], Miguel Roman Rodriguez[4], Ioanna Tsiligianni[5]
[1]University Medical Center Groningen, The Netherlands, [2]Certe Laboratories, Groningen, The Netherlands, [3]Inhalation Medication Instruction School Foundation, Groningen and Martini Hospital, The Netherlands, [4]IB Salut Balearic Primary Care Health Service, Primary Care Research Institute, Palma de Mallorca, Spain, [5]University of Crete, Greece.

Brief Outline of Context: The optimal use of inhaled medication, the mainstay of treatment for asthma and COPD, remains a major challenge. Despite many efforts, incorrect inhalation technique is common in patients as well as in health care professionals (HCPs). Developing new approaches to improve inhalation technique (education) have to be encouraged. Incorporating the views of patients, HCP as well as knowledge of educational theories might provide valuable information in order to optimise inhalation technique education.

Brief Outline of What Change you Planned to Make: This study aims to investigate the experiences and opinions of HCP involved in the management of asthma and COPD with regard to inhalation technique education.

Assessment of Existing Situation and Analysis of its Causes: This study is embedded in an international study (Netherlands, Spain and Greece) initiated by the Inhaler Research Workgroup (IRW) to optimise inhaler technique. A qualitative and a quantitative approach was used, respectively focus group meetings and a questionnaire for triangulation. First two focus group meetings (respectively, 9 and 11 HCP) have been performed in the Netherlands. HCP involved in the management of asthma and COPD (i.e. pulmonologist, general practitioner, respiratory nurse, pharmacists, pharmacy assistant, pulmonary function assistant, nurse practitioner, home care worker) participated. Different themes were covered: current practice in inhaler technique education, training for HCP, cooperation between different HCP, eHealth tools, patients' needs/views from previous performed interviews. Second, a self-developed questionnaire to validate these results was filled out by 193 Dutch HCP in the field.

Strategy for Change: The results revealed lack of uniformity and (organisational) difficulties (e.g. time, financial, drug preference policy, cooperation between involved HCP) with regard to inhalation technique education. Providing information, demonstration, practicing and feedback are considered crucial in teaching correct inhaler use. Visual aids might be helpful. Proper training in inhalation technique education for HCP is required. Secondly, a questionnaire to validate these results was filled out by 193 Dutch HCP in the field. The results demonstrated consistent findings with regard to the content as well as the organisational requirements.

Lessons Learnt and Message for Others: This study identified the experiences and opinions of HCP with regard to inhalation technique education. The optimal content of inhaler technique education needs to be elaborated. Moreover, time, appropriate training of HCP and fine-tuning the cooperation between HCP are considered crucial to optimise inhalation technique and subsequently the management of asthma and COPD.

Declaration of Interest: The IRW study is funded by Astrazeneca, Boehringer Ingelheim and Mundipharma and University of Groningen, University Medical Center Groningen

Corresponding Author: Esther Metting Email: e.i.metting@umcg.nl

IS04. Inhaled Steroids in COPD Withdrawal Tool: A Desktop Helper

Alan Kaplan[1], Miguel Roman-Rodriguez[2], Ioanna Tsiligianni[3], David Price[4]
[1]Family Physician Airways Group of Canada, [2]GRAP, Spain, [3]IPCRG, Greece, [4]Respiratory Effectiveness Group, Singapore.

Brief Outline of Context: Inhaled corticosteroids (ICS) are overprescribed in COPD[1]. ICS have significant side-effects and adequate bronchodilation may be as good/better for exacerbation prevention [2,3,] so ICS withdrawal would benefit many patients. A minority of COPD patients have concomitant asthma requiring ICS3; therefore, a systematic approach is needed to ensure appropriate evaluation, and safe ICS withdrawal.

Brief Outline of What Change you Planned to Make: In partnership with the IPCRG, a desktop helper was created to educate and guide clinicians on ICS withdrawal, when appropriate.

Assessment of Existing Situation and Analysis of its Causes: ICS are over-prescribed in GOLD A and B patients, contrary to current recommendations [1.4]. Additionally, ICS combinations are often started inappropriately at early stages of COPD1, when benefits may be negligible. Newly available LABA (Long-Acting Beta-Agonists)/LAMA (Long-Acting Muscarinic Antagonist) combinations improve symptoms and reduce exacerbations [2], providing an ICS-free pharmacotherapy option.

Strategy for Change: Implementation will require a significant change in thinking and behaviour, and clear communication around: why change (evidence); who says (guidelines); and who supports (IPCRG). Literature reviews were conducted to create algorithms to: determine appropriateness of ICS therapy; provide a stepwise process for ICS withdrawal to maximize outcomes and minimise harm. An existing algorithm [5] was modified to improve clinical utility, while ensuring appropriate safety. Data from FLAME[6] and WISDOM [7]support moving from LABA/ICS or triple therapy to LABA/LAMA [2,3]. Algorithms also describe the required follow-up to minimize risk during ICS withdrawal.

Measurement of Improvement: Validation studies are planned to measure physician understanding, utility, efficacy and safety.

Effects of Change: Reduce inappropriate exposure to ICS in COPD, while effectively managing symptoms and exacerbation risk.

Lessons Learnt: Clinicians are reluctant to make changes in therapy, even in light of new guidelines and evidence, unless provided with clear, practical, and efficient processes to do so.

Message for Others: The right drug for the right condition in the right patient is a clinicians' mantra. Do no harm by safely adjusting medications to appropriate treatments.

Declaration of Interest: This project was funded by Novartis. No payments were made to the authors to prepare this desktop helper.

Corresponding Author: Alan Kaplan Email: for4kids@gmail.com

References:

1. Price D, Yawn B, Brusselle G, Rossi A. Risk-to-benefit ratio of inhaled corticosteroids in patients with COPD. Prim Care Respir J. 2013;22(1):92–100.
2. Wedzicha JA, et al. N Engl J Med 2016; 374: 2222-2234.
3. Kaplan AG. Int J Chron Obstruct Pulmon Dis. 2015;10:2535–48.
4. Global Initiative for Obstructive Lung Disease (GOLD) 2016. http://www.goldcopd.com. Accessed 14 Sept 8 2016.
5. Magnussen H et al. N Engl J Med. 2014; 371(14):1285–94
6. **Indacaterol–Glycopyrronium versus Salmeterol–Fluticasone for COPD.NEJM** N Engl J Med 2016; 374:2222-2234June 9, 2016DOI: 10.1056/NEJMoa1516385
7. **Withdrawal of Inhaled Glucocorticoids and Exacerbations of COPD.** N Engl J Med 2014; 371:1285-1294October 2, 2014DOI: 10.1056/NEJMoa1407154

IS06. Screening for obstructive sleep apnea at primary health care system

Gordana Kiteva-Trenchevska[1], Katarina Stavrikj[2], Svetlana Stojkova[3], Radmila Ristovska[4]
[1]University Clinic of Neurology, Macedonia, [2]Center for Family Medicine, Medical Faculty Skopje, Macedonia, [3]PZU Dr.Svetlana Stojkova, Macedonia, [4]PZU Dr Radmila Ristovska, Macedonia,

Aim: The aim is to increase the awareness of OSAas a risk factor for cardiovascular and cerebrovascular diseases at primary level of health care, by involving family doctors in screening procedure for OSA.

Brief Outline of what change you planned to make: Objectives:For the purpose of screening for OSA family doctors will be thought to use the so cold stop-bang questionnaire in everyday practice to manage suspected OSA cases according evidence –bases guidelines.

Assessment of Existing Situation and Analysis of its causes: Background:Obstructive sleep apnea (OSA) is well recognized risk factor at tertiary level of health care for increased morbidity (cardiac arrhythmias, myocardial infarction, stroke, metabolic syndrome, high blood pressure) and mortality (cardiovascular diseases, traffic accidents). Nocturnal signs and symptoms of OSA include snoring, observed apneas, awakening with a sensation of choking or gasping, unexplained tachycardia, restless sleep, sweating during sleep.Sleep interruption activates the sympathetic vegetative nerve system with negative effect of the function of different organs and systems, leading to increased morbidity and mortality if not treated. Sleep interruption manifests with excessive daily sleepiness, drowsiness, fatigue, lack of energy, morning headache, attention deficit, prolonged reaction time, memory impairment, impulsivity, irritability, depression, errors in psychomotor functioning (with motor vehicle, machines...). Family doctors are not involved in screening for OSA. Polysomnography as the gold standard to diagnose OSA is recognized as the diagnostic procedure at tertiary level of health care system in R Macedonia. Unfortunately, if the patient is diagnosed even as severe OSA the health insurance system in R Macedonia does not cover the expenses for the treatment options (CPAP/BiPAP), although OSA treatment will decrease morbidity and mortality in the population.

Strategy for Change:
Methods: Family doctors should use the stop-bang questionnaire to check several symptoms and signs in the population, screening for OSA. According the so cold stop-bang questionnaire, s is for snoring, t is for tiredness, o is for observed breathing stop during sleep from someone, p is for high blood pressure, b is for BMI> 35 kg/m², a is for age> 50 years , n is for neck circumference> 40 cm and g is for gender- male. Stop- bang questionnaire interpretation according answering yes or no is as follow: high risk of OSA: yes 5 – 8,intermediate risk of OSA: yes 3 – 4, low risk of OSA: yes 0 – 2. For definitive diagnose of OSA the suspected patient should be referred for polysomnography.

Measurement of improvement:
Family doctors will be involved in screening for OSA and the suspected patient should be referred for polysomnography for definitive diagnose, thus decreasing the number of underdiagnosed OSA cases in the population.

Effects of change: Improving screening for OSA as the risk factor for cardiovascular and cerebrovascular diseases at the primary level of health care will enable optimal evidence-based pathways of care.

Lessons learnt: As in many cases where screening procedure at primary level of health care system serves for increasing the awareness of a certain health-care problem in the population, decreasing the morbidity and mortality of the population, screening for OSA at the primary level of health care system will contribute for prevention of serious consequences of OSA. Improving the knowledge of family doctors for screening OSA will recruit far more patients at risk for OSA and serious consequences from OSA, contributing to on time and better treatment of OSA and better quality of life in the population.

Message for others:
Expected outcomes: We hope that results of this project will be used by service planners and developers, insurance funds, clinicians from primary care, secondary and tertiary care to improve management for OSA enabling better life quality of the population.

Declaration of Interest:
No competing interests

Corresponding Author: Gordana Kiteva-Trenchevska Email: g.kiteva.trencevska@gmail.com

IS07 To shake or not to shake, that's the question! Important suggestions for improvement provided by the International Inhaler Research Workgroup

Esther Metting[1], Paul Hagedoorn[1], Siebrig Schokker[1], Ellen van Heijst[2], Titia Klemmeier[3], Miguel Roman Rodriguez[4], Ioanna Tsiligianni[1 5], Thys van der Molen[1], Janwillem Kocks[1]
[1]University Medical Center Groningen, The Netherlands, [2]Certe Laboratories, Groningen, The Netherlands, [3]Inhalation Medication Instruction School Foundation, Groningen and Martini Hospital, The Netherlands, [4]IB Salut Balearic Primary Care Health Service, Primary Care Research Institute, Palma de Mallorca, Spain, [5]University of Crete, Greece.

Brief Outline of Context: In 2014, the Inhaler Research Workgroup (IRW) was formed by an international and interdisciplinary group of scientists and health care professionals. Aim of the IRW is to improve inhaler technique in patients with asthma and COPD using a unique and novel approach.

Assessment of Existing Situation and Analysis of its Causes: This is necessary because 70-80% of patients have poor technique (GINA/GOLD Global Initiative for Asthma/Global Initiative for Obstructive Lung Disease) leading to poor outcomes and higher costs. An estimated 334 million people have asthma and over 65 million people suffer from COPD according to the World Health Organisation.[1 2] Inhalation medication is the cornerstone of treatment. Improvements in inhaler technique can substantially increase the care for many patients worldwide.

Brief outline of What Change you Planned to Make: Current inhaler education methods are not effective enough and it is time to develop a more effective and evidence based approach.

Strategy for Change: The unique concept of the IRW is our multidisciplinary approach. Knowledge from psychology, educational sciences, pharmacy, movement sciences and clinical practice are combined. Moreover, opinions from all involved stakeholder in 3 European countries (Netherlands, Spain, Greece) are evaluated to evaluate current problems and preferred options for improvement. Our study consists of the following parts: (1) interviews with more than 100 asthma and COPD patients; (2) 6 focus groups with professionals; (3)Review to gather effective strategies to teach small motor handling (e.g. brushing teeth, injecting insulin).

Measurement of Improvement: All these findings will be combined into a new inhaler instruction method based on science and opinions from stakeholders. This method will be tested in a randomised controlled trial..

Lessons Learnt: Preliminary results show that 70 patients have been interviewed showing that although all patients have received and instruction, inhaler technique is poor. Patients would like to practice their device and receive feedback during the instruction. The focus groups with professionals in Spain and the Netherlands showed that the organisation of inhaler instructions is poor and professionals often lack time and knowledge to provide a good instruction. Our review shows several promising educational theories that might be incorporated in the new inhaler instruction method like Peyton's 4 step approach. At the IPCRG we will present the progress of our proceedings that will be of interest of HCPs and policymakers. We have patients' permission to show videos of inhaler technique. These videos are very informative and will definitely launch discussion.

Message for Others: Inhaler instruction is complicated, in a few seconds many different steps need to be performed. Moreover, many different devices and an unstructured organisation regarding inhaler instruction make it more complicated. Evidence based instruction methods are needed. The IRW provides suggestions for improvement.

Declaration of Interest: The IRW study is sponsored by Astrazeneca, Boehringer Ingelheim, Mundipharma

Corresponding Author: Esther Metting Email: e.i.metting@umcg.nl

References:

1. World Health Organisation. Burden of COPD [Internet]. Vol. 2012. 2012. Available from: http://www.who.int/respiratory/copd/burden/en/index.html

2. World Health Organisation. 10 facts on asthma [Internet]. Vol. 2012. 2011. Available from: http://www.who.int/features/factfiles/asthma/en/index.html