WHAT IS KNOWN ABOUT THE PHARMACOLOGY OF MAPPING VARIATION BETWEEN NATIONAL AND LOCAL DEPRESCRIBING LONG ACTING BETA2 AGONISTS IN CHILDREN AND ADOLESCENTS WITH STABLE ASTHMA: A SYSTEMATIC REVIEW

Eve Roberts, Jia Yi Gan, Daniel Hawcutt, Stefan Spinty, Paediatric Neurology, Alder Hey Children’s Hospital

1Pharmacology Toxicology, Radboud UMC; 2Centre for Mathematics of Precision Healthcare, Imperial College London; 3Helix Centre for Design in Healthcare, Imperial College London; 4Department of Pediatric Intensive Care, University Medical Center Utrecht; 5Centre for Paediatrics and Child Health, Imperial College London; 6Department of Surgery and Cancer, Imperial College London

36 MAPPING VARIATION BETWEEN NATIONAL AND LOCAL CLINICAL PRACTICE GUIDELINES FOR ACUTE PAEDIATRIC ASTHMA FROM THE UNITED KINGDOM AND THE NETHERLANDS

1Charlotte Koldeweij, 2Jonathan Clarke, 3Carmen Rodriguez Gonzalvez, 4Joppe Nijman, 5Ian Maconochie, 6Nicholas Appelbaum. 1Pharmacology Toxicology, Radboud UMC; 2Centre for Mathematics of Precision Healthcare, Imperial College London; 3Helix Centre for Design in Healthcare, Imperial College London; 4Department of Pediatric Intensive Care, University Medical Center Utrecht; 5Centre for Paediatrics and Child Health, Imperial College London; 6Department of Surgery and Cancer, Imperial College London

Introduction Increasingly, hospitals rely on local clinical practice guidelines (CPGs) alongside national guidance to standardise clinical care. This study examines variation between national and local CPGs, using the example of acute paediatric asthma (APA) CPGs from the United Kingdom and the Netherlands.

Methods Fifteen British and Dutch local CPGs were collected with the matching national guidance for the management of APA. The drug sequences, routes and methods of administration recommended for patients with severe APA were represented. Deviations from national guidance were measured. Variation in recommended doses of inhaled salbutamol was examined. CPG quality was assessed using the AGREE II instrument.

Results British and Dutch national CPGs differed in the recommended drug choices, sequences, routes and methods of administration for severe APA. Local British CPGs diverged from national guidance for 23% of their recommended interventions compared to 8% for Dutch local CPGs. Variation in second-line recommendations was greater than for first-line recommendations across local CPGs from both countries. Recommended starting doses for salbutamol infusions varied by more than tenfold. The quality of the sampled local CPGs was low across five out of six AGREE domains (<60%).

Conclusions Local CPGs for the management of severe APA featured substantial variation and frequently diverged from national guidance. Their methodological quality was low. Although limited to one condition, this study suggests that unmeasured variation across local CPGs may contribute to variation of care more broadly, potentially undermining healthcare quality.

DEPRESCRIBING LONG ACTING BETA2 AGONISTS IN CHILDREN AND ADOLESCENTS WITH STABLE ASTHMA: A SYSTEMATIC REVIEW

1Wiktoria Drozdz, 2Ian Sinha, 3Daniel Hawcutt. 1School of Life Sciences, University of Liverpool, Alder Hey Children’s Hospital; 2Respiratory department, Alder Hey Children’s Hospital, University of Liverpool; 3NHRI Alder Hey Clinical Research Facility, Alder Hey Children’s Hospital, University of Liverpool

Conclusions There is very limited evidence into the pharmaco-kinetics -dynamics of IM therapies for children affected by muscular dystrophy. Given the recognised changes in the muscle structure and function, studies to explore if this causes clinically significant changes in boys with DMD are required.