



# PA4186: Global Asthma Network identifies gaps in essential asthma medicines

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## Abstract

**Background** Asthma patients in high-income countries (HIC) and low- and middle-income countries (LMIC) need uninterrupted supplies of affordable, quality-assured essential medicines. The World Health Organization (WHO) NonCommunicable Disease (NCD) Global Action Plan sets an 80% target for availability of essential NCD medicines. Access is likely to improve if medicines are on national Essential Medicines Lists (EML) and provided free or subsidised.

**Methods** Principal investigators of the Global Asthma Network were sent a questionnaire in 2014-5 about the inclusion of essential asthma medicines in their countries' EML and national reimbursement list (NRL).

**Results** 111 of 120 countries sent data. Of 91 (82%) countries with an EML, 72 (79%) included 1 or more inhaled corticosteroids (ICS) and 79 (87%) included salbutamol. Inclusion of WHO-recommended dosages: of HIC with EML, 16 (70%) had beclometasone 50µg and 17 (74%) 100µg; of LMIC with EML, 38 (56%) had beclometasone 50µg and 31 (46%) 100µg.

Of 80 (72%) countries with an NRL, 64 (80%) included 1 or more ICS; 32 (94%) of the HIC and 32 (70%) of the LMIC. There were 29 (85%) HIC but only 23 (50%) LMIC that had 50µg beclometasone; 28 (82%) HIC but only 20 (43%) LMIC had 100µg beclometasone. 69 (86%) had salbutamol; 32 (94%) of HIC and 37 (80%) of LMIC. Patients in HIC with NRL are best served (91% HIC included ICS and salbutamol). Patients in the 24 (34%) LMIC with no NRL as well as those in LMIC with an NRL but no ICS are likely to have very poor access to affordable quality-assured ICS.

**Conclusions** Many LMIC do not have essential asthma medicines on their EML or NRL. This hinders access. Technical guidance and advocacy for policy change is urgently required.

## Background

Patients with asthma need an uninterrupted supply of affordable quality-assured essential medicines.

One vital step is to ensure asthma medicines from the WHO Essential Medicine List (EML) are on a country's EML. The other is to include them on the country's national reimbursement list (NRL).

The WHO Global Action Plan on non-communicable diseases sets a target of 80% for availability of essential medicines.

The WHO EML includes two inhaled corticosteroids (ICS): beclometasone 50 micrograms (µg) and 100µg, and budesonide 100µg and 200µg, as well as one bronchodilator: salbutamol 100µg.

Previous studies have indicated that in many low- and middle-income countries (LMICs) access to affordable, quality-assured essential asthma medicines is limited.

## Hypothesis, Aim and Methods

### Hypothesis

That in many countries essential asthma medicines are not on the country EML or NRL

### Aim

To determine

a) how many countries have the essential asthma medicines on their EML and NRL

b) which WHO essential asthma medicines are included on the lists

### Methods

A cross-sectional email survey of GAN centres was carried out between 2013 and 2014. The survey was sent to GAN principal investigators in 276 centres in 120 countries, 41 were high-income countries (HICs) and 79 LMICs.

The survey had two main questions: Whether their country has an EML and a NRL (Yes/No/Don't know). If they entered 'Yes', they then reported whether each of three WHO EML asthma medicines in dosages listed in the WHO EML (beclometasone 50 µg and 100µg, and budesonide 100µg and 200µg, and salbutamol 100µg) was on their list (Yes/No/Don't know).



## Results

111 of 120 (93%) countries sent data.

### Essential Medicines List

91/111 (82%) had an EML. Of these 72 (79%) included 1 or more inhaled corticosteroids (ICS) and 79 (87%) included salbutamol.

Inclusion of WHO-recommended dosages: of HIC with EML, 16 (70%) had beclometasone 50µg and 17 (74%) 100µg; of LMIC with EML, 38 (56%) had beclometasone 50µg and 31 (46%) 100µg.

### National Reimbursement List

80/111 (72%) countries had an NRL. Of these, 64 (80%) included 1 or more ICS; 32 (94%) of the HIC and 32 (70%) of the LMIC.

Beclometasone 50µg was on the NRL in 29 (85%) HIC but in only 23 (50%) LMIC. Beclometasone 100µg was on the NRL in 28 (82%) HIC but in only 20 (43%) LMIC had. Salbutamol, was on the NRL in 32 (94%) of HIC and 37 (80%) of LMIC.

Countries with NRL which included any ICS and salbutamol were in 31 (91%) HIC, and 31 (67%) LMICs, the most poorly served.

15 (22%) of LMICs with an EML still do not include any ICS, and 14 (30%) of those with an NRL do not include any ICS.

## Summary

Many countries do not have the WHO-recommended essential asthma medicines on their EML and NRL, and many are not providing them free or subsidised for patients, especially in LMICs.

This situation is detrimental for patient access to medicines and is likely to be perpetuating the under-prescription and underuse of ICSs.

This issue needs addressing to reduce the burden of asthma.

## Discussion

One step towards the WHO 80% availability target for NCD essential medicines will be for countries to ensure essential asthma medicines figure on their own EML and NRL. Progress should be monitored and evaluated at a national and international level. These are crucial first steps towards making essential asthma medicines available, quality-assured, and affordable for all.

## Selected References

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