

Exploring excessive use of short-acting beta2-agonists (SABA) as reliever therapy in asthma patients, identified with pharmacy dispensing data

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Declaration of interest:

I herewith declare:

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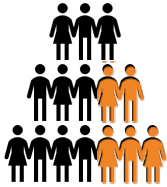


Background: excessive SABA use



Definition of excessive SABA use

- ≥ 2 inhalations per week¹



Prevalence of excessive SABA use

- $\approx 30\%$ of asthma patients in Europe²
- $\approx 39\%$ of SABA users in the Netherlands³
- Based on pharmacy dispensing data



Association with poor asthma control

- ↑ Hyperresponsiveness of the airways⁴
- ↑ Exacerbations⁴
- ↑ Hospital admissions⁴
- ↑ Mortality⁴

2

Emotions, beliefs,
side-effects, worries,
knowledge...

1



Potential excessive SABA user,
identified with dispensing data

Actual excessive SABA user

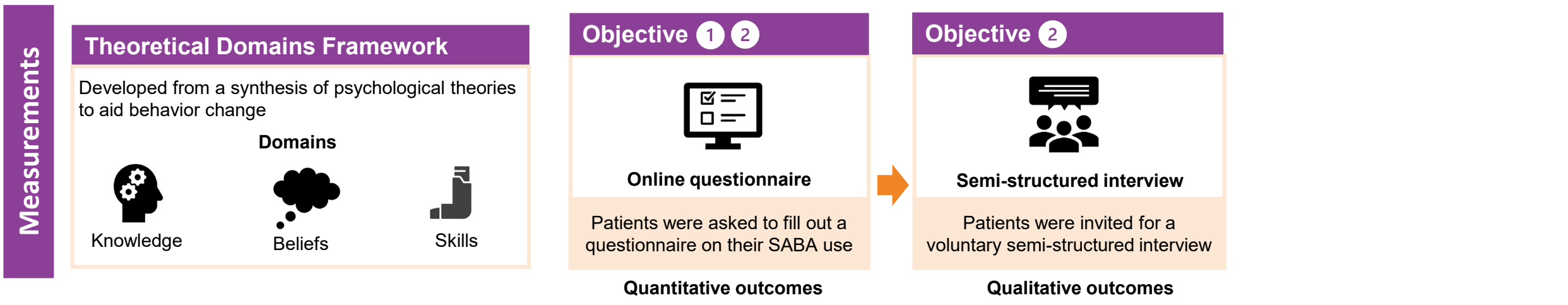
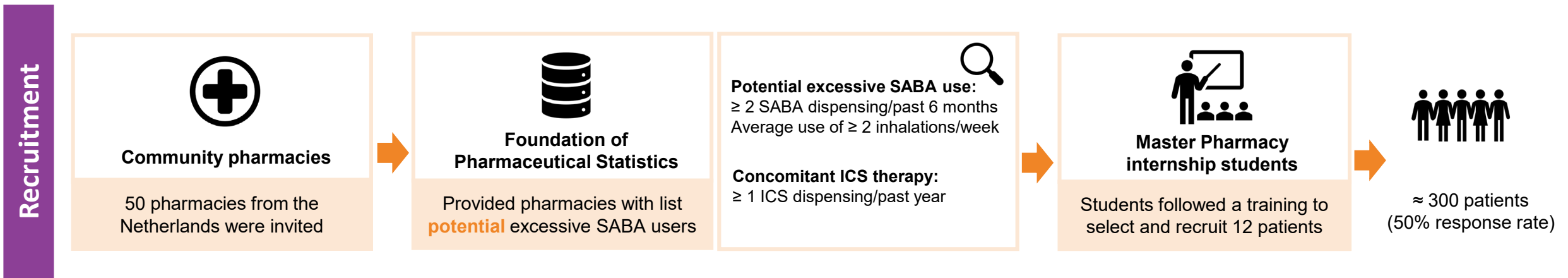
Objectives

- 1 To what extent excessive SABA dispensing represent actual excessive SABA use
- 2 To define patient reported reasons for excessive SABA use

1. Global Initiative for Asthma (2020). Global Strategy for Asthma Management and Prevention. Available at: www.ginasthma.org (Accessed March 10, 2021).
2. Janson C, Menzies-Gow A, Nan C, *et al.* SABINA: An Overview of Short-Acting β_2 -Agonist Use in Asthma in European Countries. *Adv Ther.* 2020;37(3):1124-1135.
3. Foundation of Pharmaceutical Statistics (SFK). 2021.
4. Canonica GW, Paggiaro P, Blasi F, *et al.* Manifesto on the overuse of SABA in the management of asthma: new approaches and new strategies. *Thor Acta Respir Dis.* 2021;15:17534666211042534.

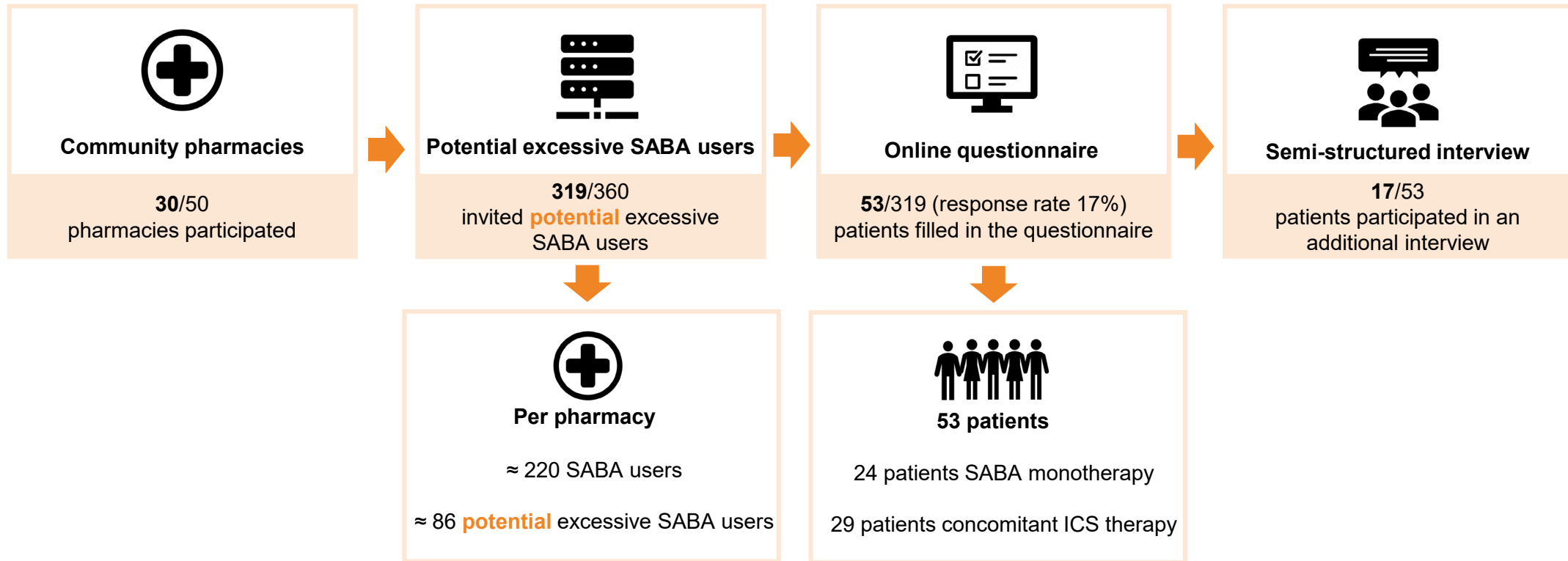


Methodology: mixed-methodology research design

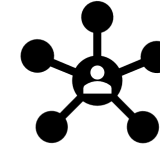


Results: inclusion

Inclusion



Results: Use of pharmacy dispensing data as screening tool



Objective 1



Positive Predictive Value (PPV):

- **Actual** excessive SABA use was observed in 81.1% of patients
- Indicating 4 out of 5 patients with excessive SABA use identified with dispensing data
- This corresponds to ≈ 70 patients per pharmacy in the Netherlands



n=43

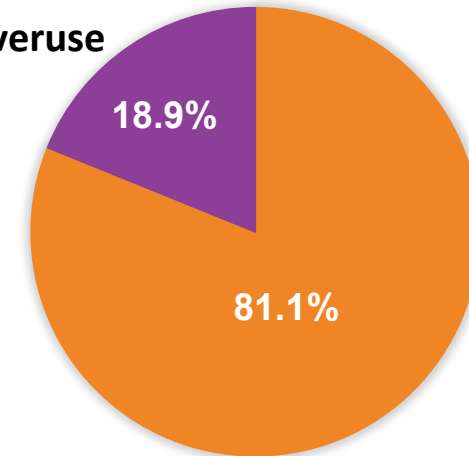
Actual excessive SABA users:

- Daily SABA use was observed in 61% of patients
- Average of 3.7 (± 2.1) inhalations per day
- Non-adherence to ICS therapy
- Received short courses of oral corticosteroids



n=53

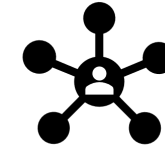
No actual SABA overuse



Actual SABA overuse



Results: Patient reported reasons for excessive SABA use



Objective 2

n=43



Knowledge

- Onset of asthma:
Asthma triggers were unknown in 44% of users
Possible triggers were not always avoided in 51% of users
- Asthma medication related:
SABA: use as needed, rapidly relieving symptoms unknown in 16% of users
ICS: Long-term use preventing airway inflammation was unknown in 20% of users



'Corticosteroids don't do anything for my asthma'



Beliefs

- Excessive SABA use was not recognized as a sign for poor asthma control in 51% of users
- Benefits outweigh the risks of SABA use
Benefits: score 4.3 (Scale: 1-5 not helpful to very helpful)
Risks: score 2.1 (Scale: 1-5 not risky to very risky)



'I like that I can taste the powder when inhaling'



Skills

- Essential inhaler technique steps were not all reported in 63% of users
- Annual inhalation instructions were not performed in 77% of users
- Different inhaler device types requiring various techniques were present in 50% of concomitant ICS users



Take-home messages:



Actual excessive SABA use is likely to be present in 4 out of 5 identified **potential** excessive SABA users in asthma



Identified reasons related to 'knowledge', 'beliefs' and 'skills' for this behavior requires targeted interventions



Confirmation is warranted in a larger sample size

