

# A systematic review of pharmacist input in the screening, management and prevention of metabolic syndrome

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Available from: [http://www.crd.york.ac.uk/PROSPERO/display\\_record.php?ID=CRD42018089862](http://www.crd.york.ac.uk/PROSPERO/display_record.php?ID=CRD42018089862)

## Background:

Metabolic syndrome (MetS) is a cluster of factors that increase the risk of cardiovascular disease and include diabetes, abdominal obesity, elevated triglycerides, low high-density lipoprotein cholesterol and high blood-pressure. A patient is considered to have MetS if 3 out of 5 factors are present<sup>1</sup>.

## Purpose:

To critically appraise, synthesise, and present the available evidence on: the types and impact of pharmacist input in MetS, to characterize the populations who would benefit most and to describe facilitators and barriers.

## Methods:

- ❖ **Search string:** Pharm\*, “Metabolic syndrome\*”, “Syndrome X” , “Insulin resistance syndrome\*”, “Dysmetabolic syndrome\*”, “Hypertriglyceridemic waist\*”, “Obesity syndrome\*”, “Metabolic Cardiovascular Syndrome”, “Reaven Syndrome X”, “Atherothrombogenic syndrome”
- ❖ **Databases:** Medline, Cumulative Index of Nursing and Allied Health Literature (CINAHL), International Pharmaceutical Abstracts (IPA), Cochrane Database of Systematic Reviews
- ❖ **Included studies:** Peer-reviewed papers published in English from 2008; all study designs were included
- ❖ **Papers assessed :** By two reviewers for methodological quality
- ❖ **Critically appraised:** Data extracted using standardized tools<sup>2</sup>

## Results:

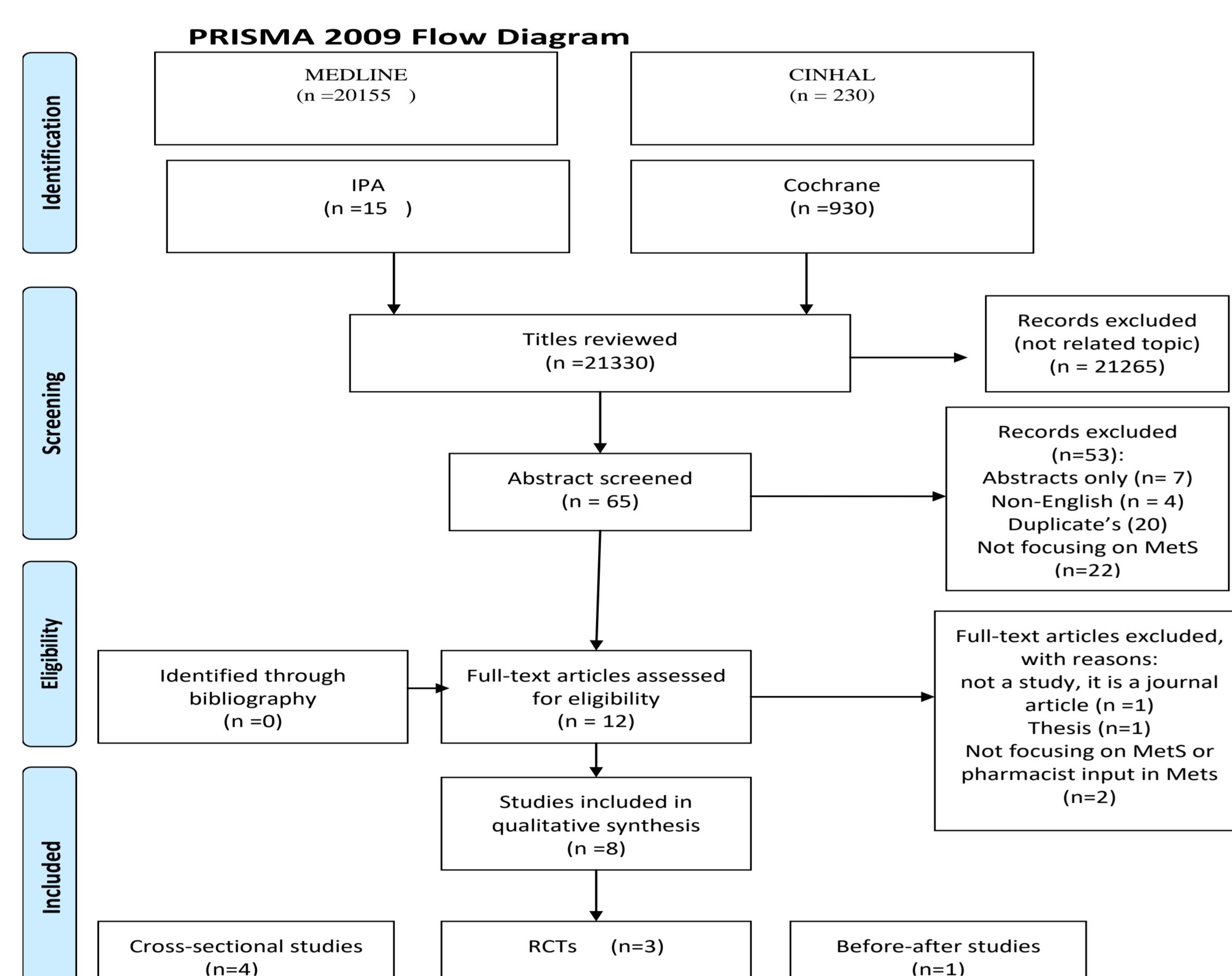


Figure 1 – Search flowchart as an adapted PRISMA diagram<sup>3</sup>

## Children and adolescent

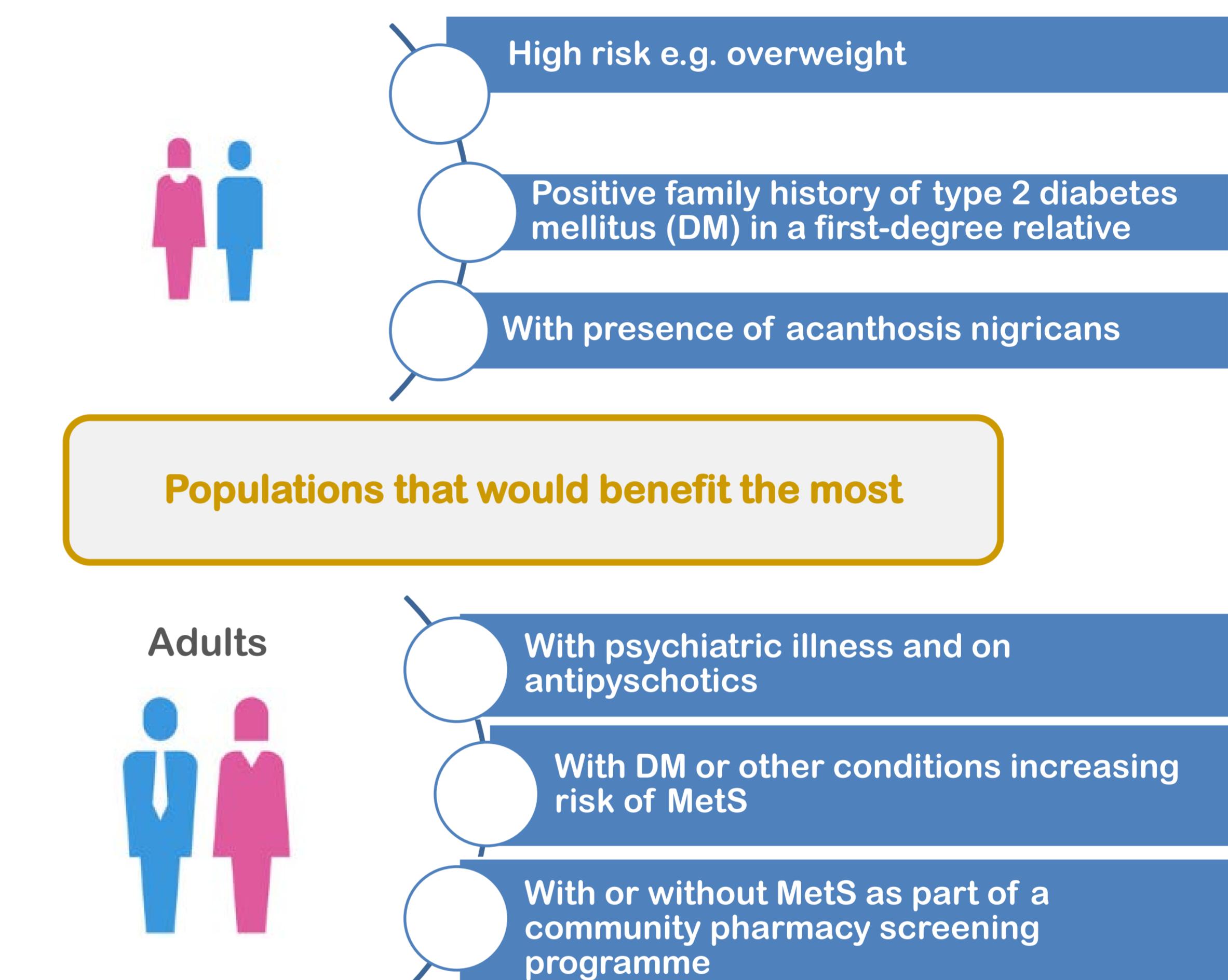


Figure 2 – The population who would benefit the most from the pharmacist input in MetS

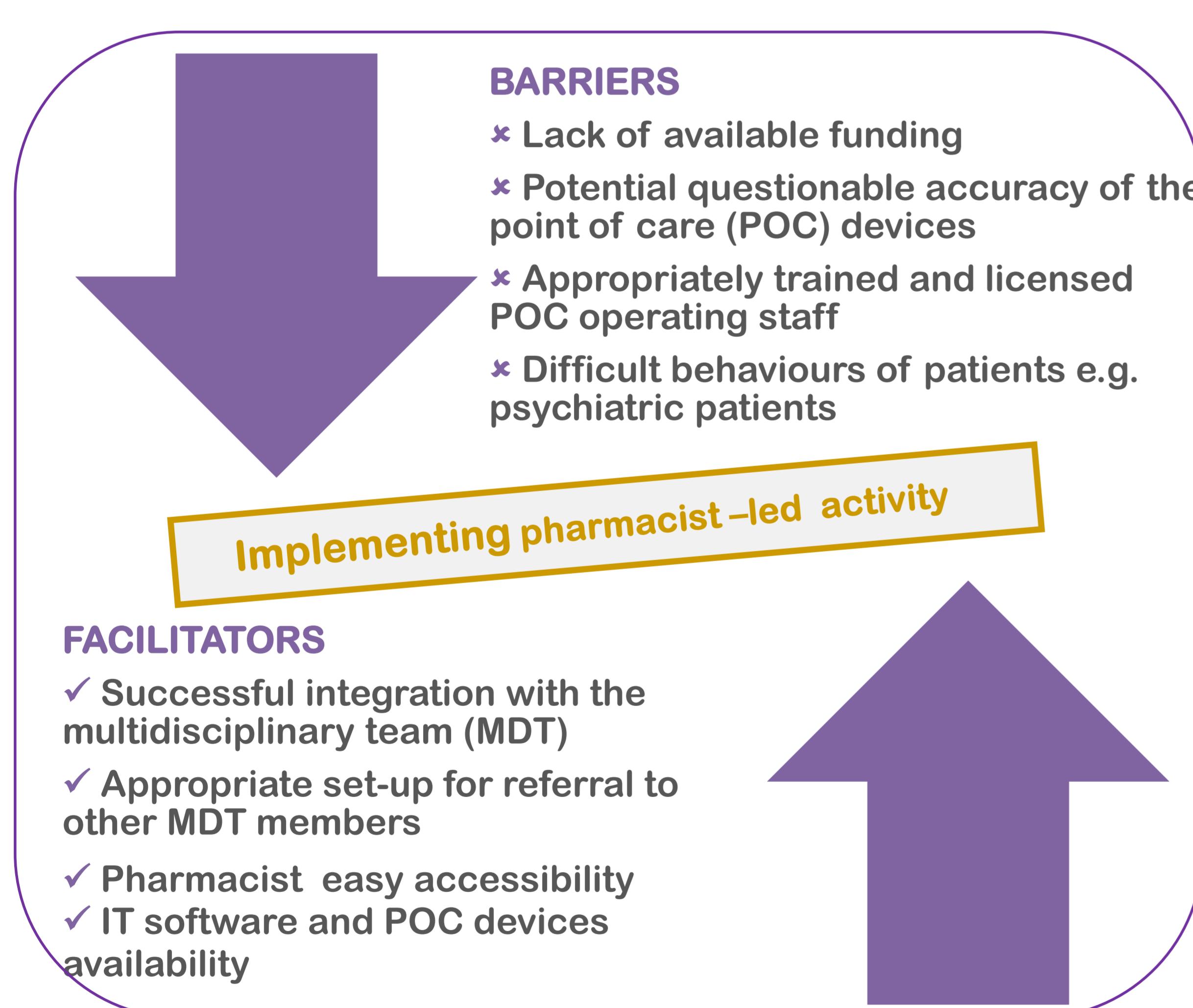


Figure 3– Some facilitators and barriers of pharmacist-led implementation

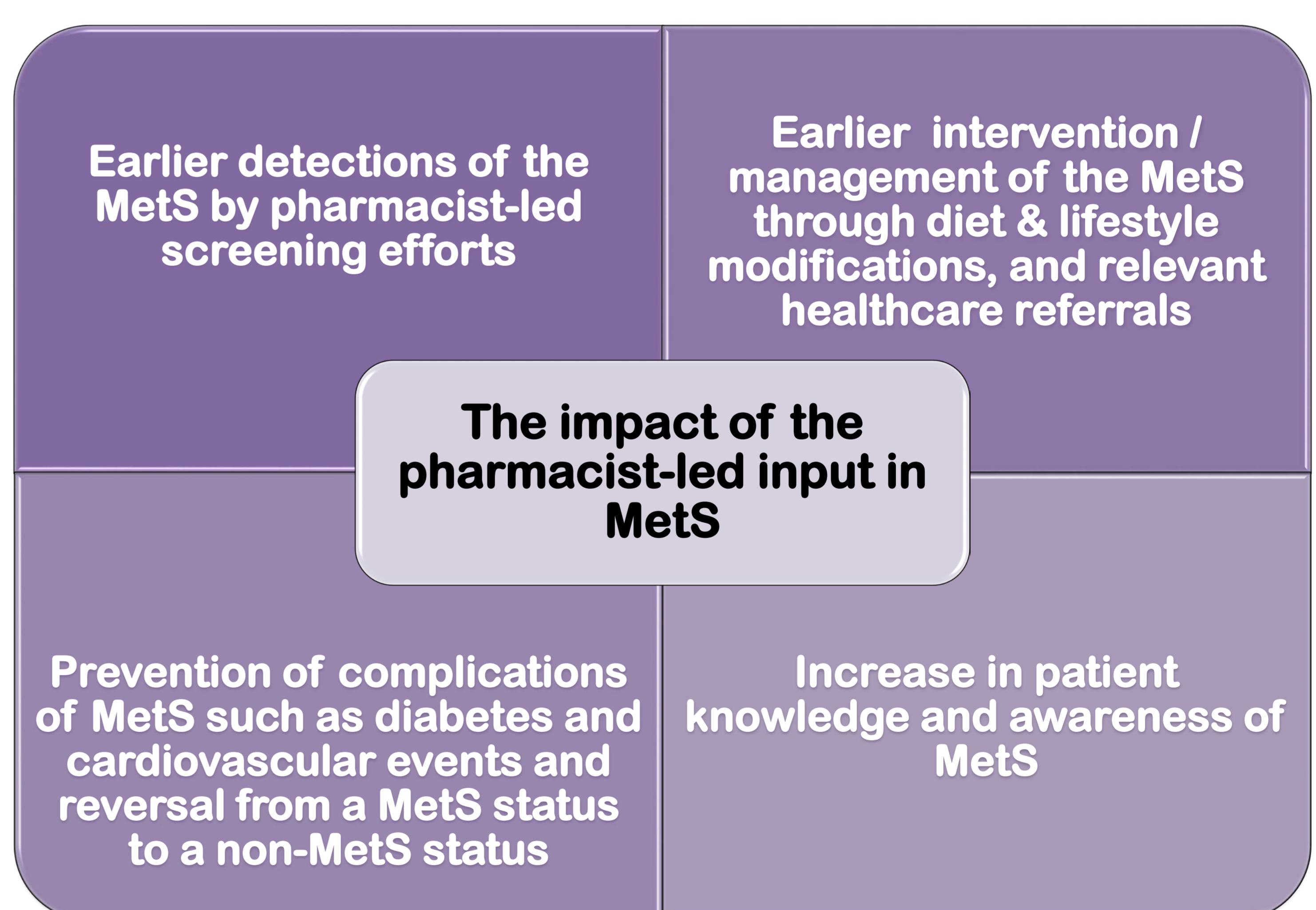


Figure 4 – Impact of the pharmacist input

## Conclusions

Pharmacists can effectively participate in the screening, prevention and management of MetS in different populations and settings to enhance patient's care.

Further research is warranted to determine the clinical and economic impact and describe the facilitators and barriers of implementing such a program.

**Disclosure:** None of the authors of this study have to disclose any possible financial or personal relationships with commercial entities that may have a direct or indirect interest in the subject matter of this study.

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