

AL ADAWI, R., STEWART, D., RYAN, C. and TONNA, A. 2020. A systematic review of pharmacists' input in the screening, management and prevention of metabolic syndrome. Presented at Qatar University Annual Research Forum and Exhibition 2020 (QUARFE 2020), 28 October 2020, Doha, Qatar. Hosted on Qspace [online]. Available from: <https://doi.org/10.29117/quarfe.2020.0152>

A systematic review of pharmacists' input in the screening, management and prevention of metabolic syndrome.

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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

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 present¹.

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
- ❖ **Papers assessed :** By two reviewers for methodological quality
- ❖ **Critically appraised:** Data extracted using standardized tools²

Results:

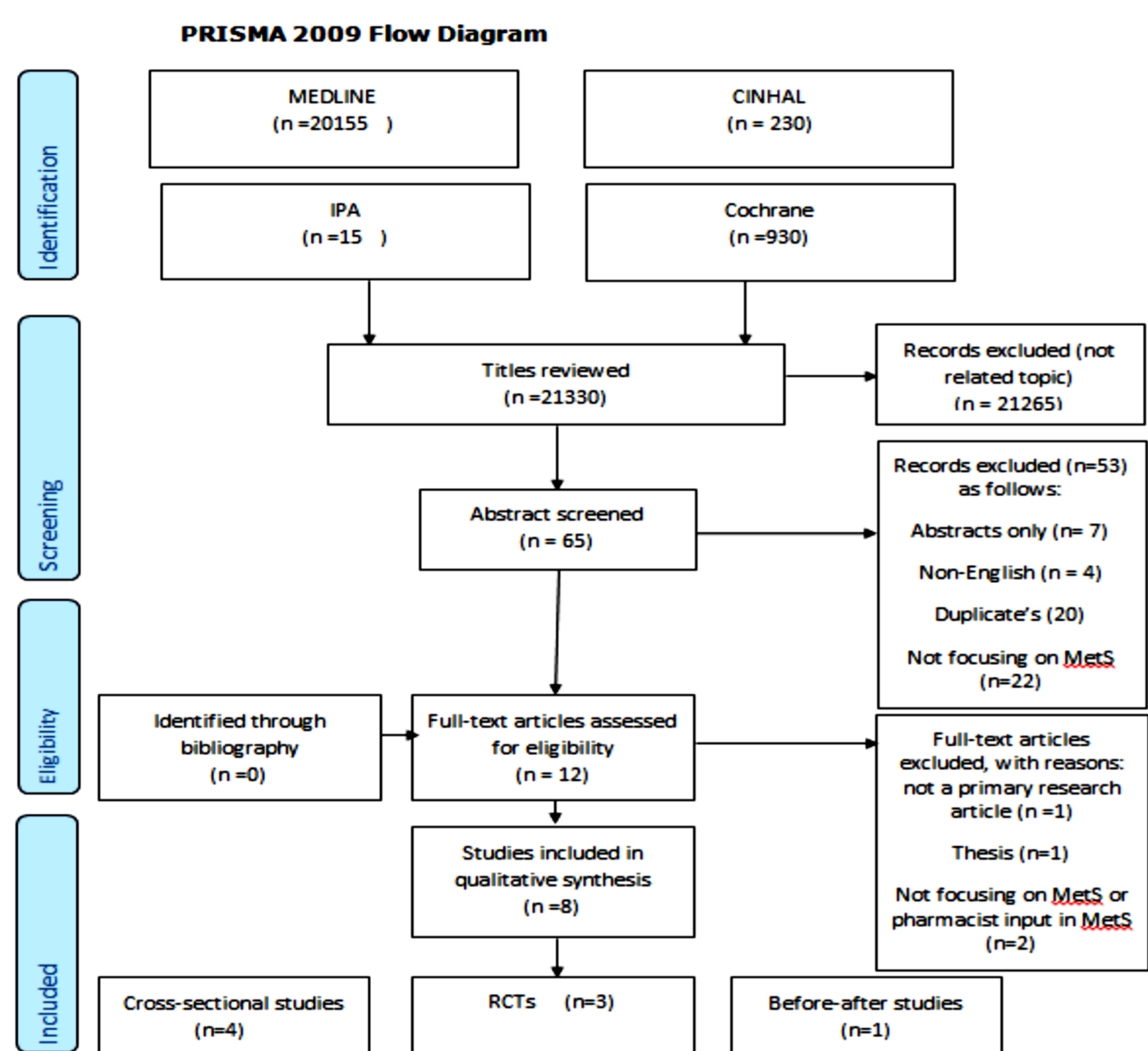
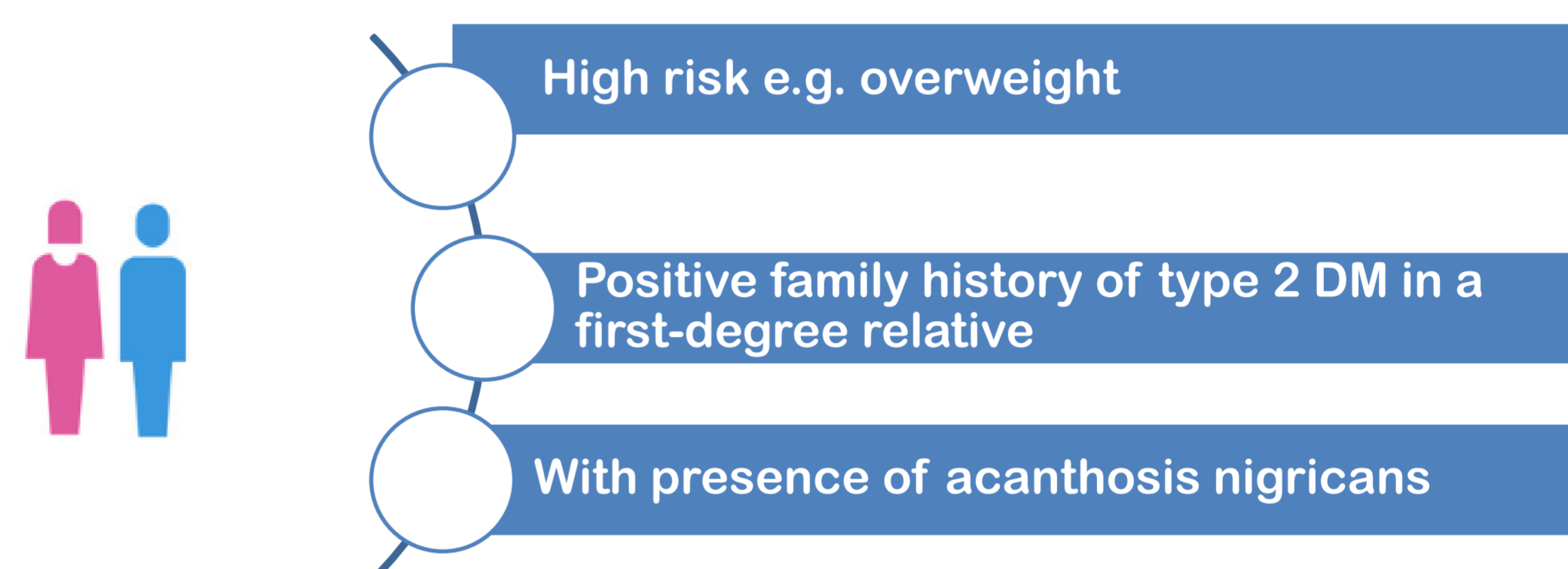


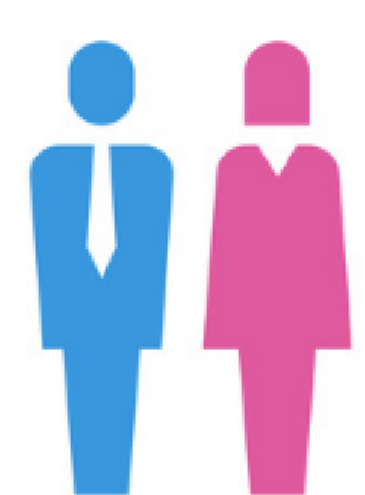
Figure 1 – Search flowchart as an adapted PRISMA diagram³

Children and adolescent



Populations that would benefit the most

Adults



- With psychiatric illness and on antipsychotics
- With DM or other conditions increasing risk of MetS
- With or without MetS as part of a community pharmacy screening programme

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

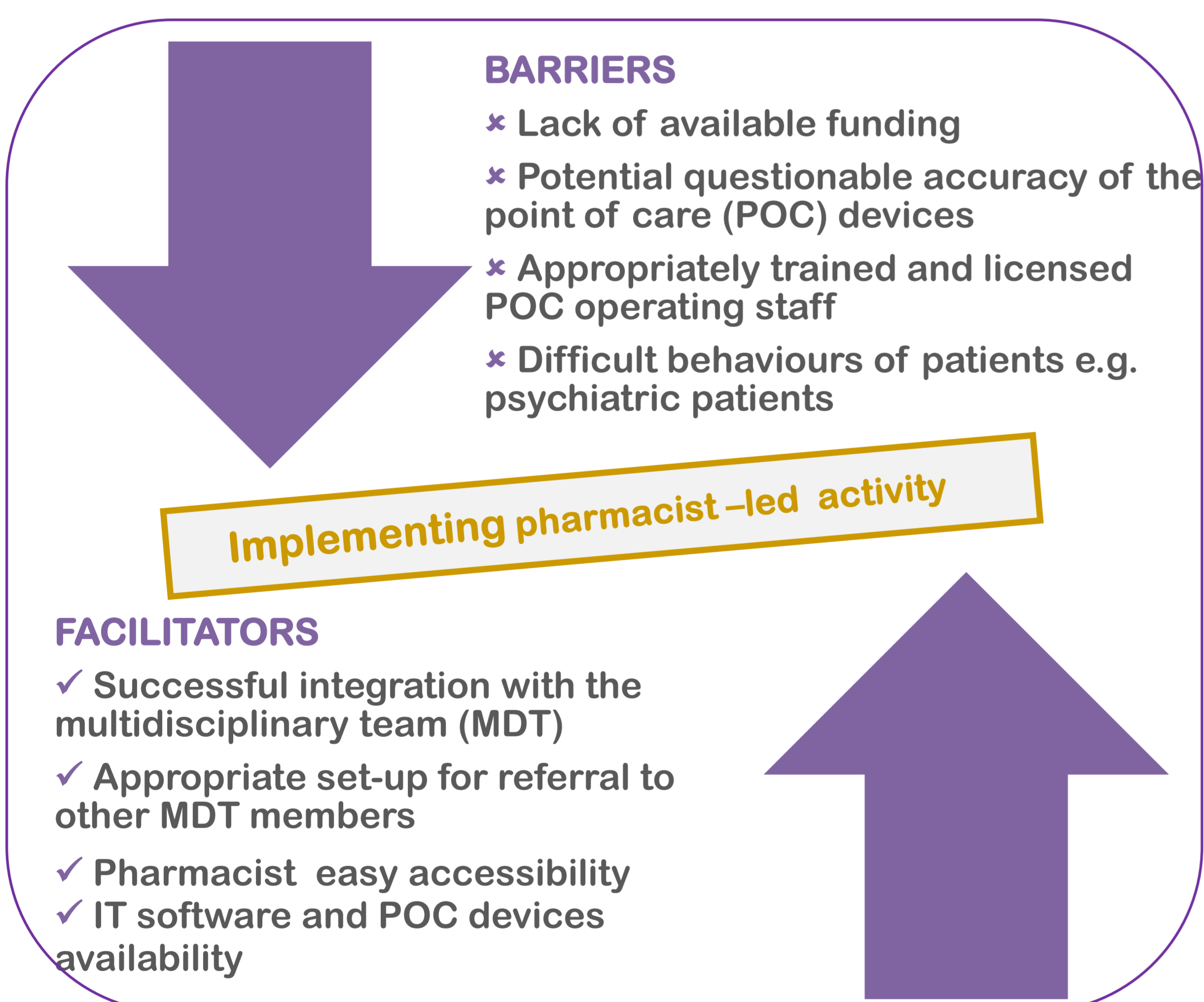


Figure 3– Some facilitators and barriers of pharmacist-led implementation

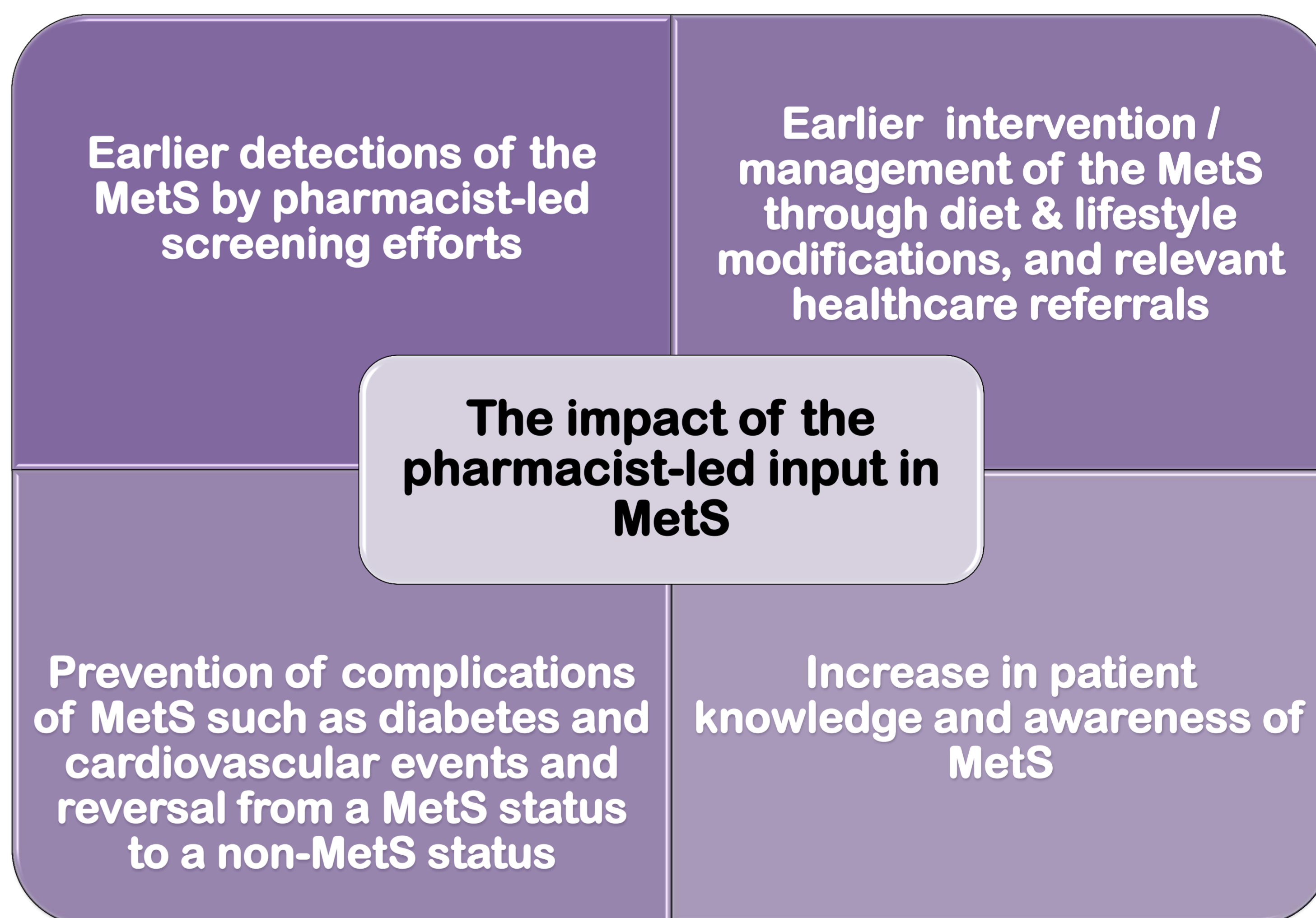


Figure 4 – Impact of the pharmacist input

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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