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

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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 1.

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:
- 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 tools

Results:

![Search flowchart as an adapted PRISMA diagram](image)

**Barriers**
- Lack of available funding
- Potential questionable accuracy of the point of care (POC) devices
- Appropriately trained and licensed POC operating staff
- Difficult behaviours of patients e.g. psychiatric patients

**Facilitators**
- Successful integration with the multidisciplinary team (MDT)
- Appropriate set-up for referral to other MDT members
- Pharmacist easy accessibility
- IT software and POC devices availability

![Some facilitators and barriers of pharmacist-led implementation](image)

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

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