

PMU14







NON-MEDICAL SWITCHING AT THE HOSPITAL: A SYSTEMATIC REVIEW ON THERAPEUTIC **CLASSES AND PATHOLOGIES THAT ARE APPROPRIATE TO ACHIEVE SAVINGS**

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Introduction

- Hospitals accounted for more than a third of the healthcare costs in Switzerland in 2017 (\$29.4 bn.).¹
- About 5% of hospitals' spending was on medicines.²
- New strategies to further reduce medication costs in hospitals must be implemented.³
- Non-Medical switching policies (NMSPs), i.e. therapeutic interchange (TI) and therapeutic subsitution (TS), have

Conclusions

- Patients' recovery and welfare is the #1 Priority.
- **Possible substantial savings opportunities with** medicines for treating:
 - Hypercholesterolemia
 Anemia
 - Peptic ulcer disease Gastroesophageal reflux disease
- Future economic evaluations regarding NMSPs

the potential to provide substantial savings while maintaining a high level of care.^{4,5}

Objectives

- **Evaluation of the economic outcomes of NMSPs.**
- Identification of the therapeutic classes and pathologies well suited for the implementation of NMSPs.

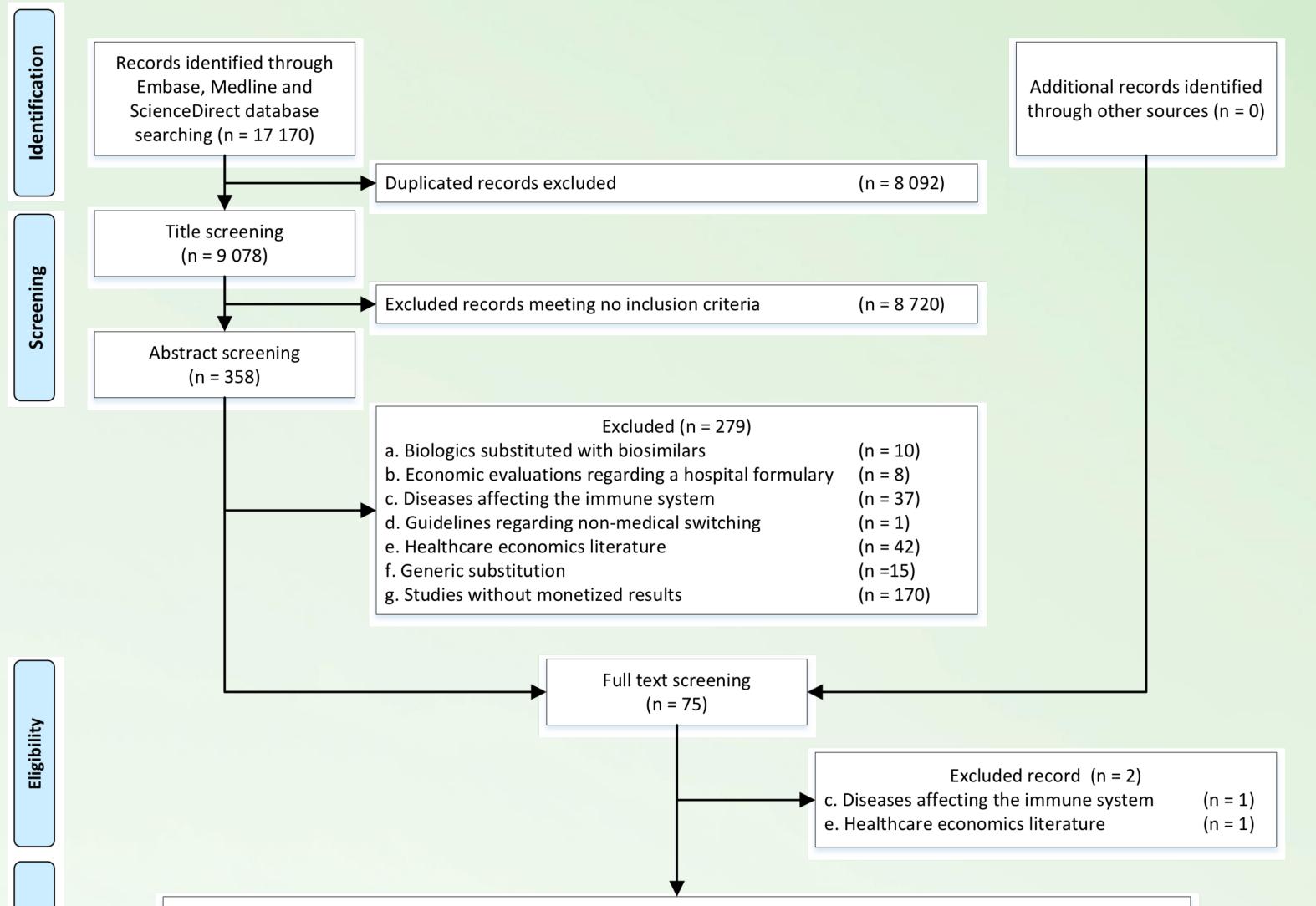
Methods

- Three Databases : Embase MEDLINE ScienceDirect
- Time period : January 1998 \rightarrow June 2018
- Twelve Medical Subject Headings (MeSH) terms were selected and combined into 62 associations to build the search strategy.

Results

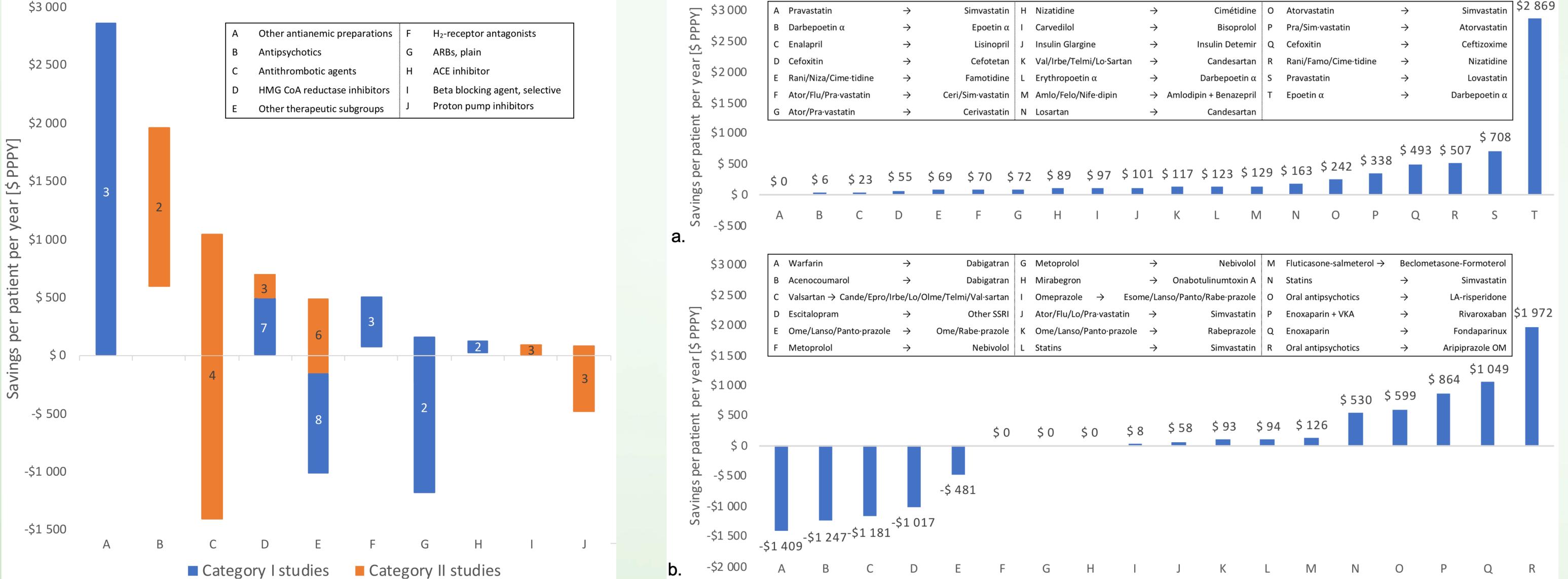
 The number of economic evaluations (2 to 10) and the extent of savings (\$0 - \$97 to \$6 - \$2 869) varies greatly depending on the therapeutic subgroup (Fig. 2). NMSP's implementation generated no extra lacksquareCOStS (Fig. 3a).

should focus on Noncommunicable diseases.



Studies included in qualitative synthesis (n = 73)CI. CA assessing an NMS following an actual TI or TS policy (n = 23) CII. CA assessing an NMS that occurred regardless of a TI or TS policy (n = 21) (n = 7) CIII. CEA and CBA assessing an NMS that occurred regardless of a TI or TS policy CIV. Studies that performed an economic evaluation between two drugs where no NMS occurred (n = 22)

Fig. 1 Flow chart of our review process. CA = Cost-analysis; CBA = Cost-benefit analysis; CEA = Cost-effectiveness analysis; EM = Economic model; CI = Category I studies; CII = Category II studies; CIII = Category III studies; CIV = Category IV studies; NMS = Non-medical switch



Included

Fig. 2 Number of studies per category and therapeutic subgroups including savings in \$ PPPY. (Category III and category IV studies excluded)

Fig. 3a Savings per patient per year [\$ PPPY] for non-medical switches (NMSs) in category I studies; 3b. \$ PPPY for NMSs in category II studies. LA = Long-acting; OM = Once-monthly; SSRI = Selective Serotonin Reuptake Inhibitors; VKA= Vitamin K antagonist

References

- Office fédéral de la statistique (OFS). Coût et financement du système de santé, https://www.bfs.admin.ch/bfs/fr/home/actualites/quoi-de-neuf.assetdetail.8746082.html (last visited on 10.2019)
- 2. Office fédéral de la statistique (OFS). Coût du système de santé selon le fournisseur de biens et services 1) et selon les prestations 2), https://www.bfs.admin.ch/bfs/fr/home/statistiques/sante/cout-financement/cout.html (last visited on 10.2019)
- 3. Duru, O. K. et al. Potential Savings Associated with Drug Substitution in Medicare Part D: The Translating Research into Action for Diabetes (TRIAD) Study. Journal of General Internal Medicine, 1-7, doi:10.1007/s11606-013-2546-6 (2013).
- 4. Schachtner, J. M., Guharoy, R., Medicis, J. J., Newman, N. & Speizer, R. Prevalence and cost savings of therapeutic interchange among U.S. hospitals. American Journal of Health-System Pharmacy 59, 529-533 (2002).
- 5. Johansen, M. E. & Richardson, C. Estimation of potential savings through therapeutic substitution. JAMA Internal Medicine 176, 769-775, doi:10.1001/jamainternmed.2016.1704 (2016).

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