SUPPLEMENTARY MATERIAL

Community-level pharmaceutical interventions to reduce the risks of polypharmacy in the elderly: overview of systematic reviews and economic evaluations

Orenzio Soler^{*1}, Jorge Otávio Maia Barreto².

 ¹ School of Pharmacy. Health Science Institute. Federal University of Pará. Belém. Pará. Brazil.
² Fiocruz School of Government. Fiocruz Brasília. Osvaldo Cruz Foundation. Brasília. Federal District. Brazil.

* E-mail: <u>orenziosoler@ufpa.br</u>

| Studies | AEES items | | | | | | | | | | | | | | | | |
|--------------------------------|------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|--------|
| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 |
| Jórdan-Sánchez et al. 2015 (1) | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | N/A | N/A | N/A | N/A | Yes | Yes | Yes |
| Desborougha et al. 2011 (2) | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | N/A | N/A | N/A | N/A | Yes | Yes | Yes |
| Bojke et al. 2010 (3) | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes | N/A | N/A | N/A | N/A | Yes | Yes | Yes |
| Studies | AEES items | | | | | | | | | | | | | | | | |
| | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | Rating |
| Jórdan-Sánchez et al. 2015 (1) | Yes | N/A | N/A | Yes | 27/27 |
| Desborougha et al. 2011 (2) | Yes | N/A | N/A | Yes | 27/27 |
| Bojke et al. 2010 (3) | Yes | N/A | N/A | Yes | 27/27 |

Supplementary Material 5 | Methodological assessment of included economic evaluation studies - AEES*

AEES contains 33-items to appraise the methodological aspects of the economic evaluation studies. All 33-items were scored as "Yes", "No", "It is not clear" or "Not Applicable". AEES comprises the following items: 1. Was the study question adequately, clearly and responsibly; 2. Has the study's target population been clearly described; 3. Were the main alternatives included in the study as well as a comprehensive description of the adternatives analyzed; 4. Was the time horizon of the model long enough to reflect the main differences - cost and outcome in health - among the strategies analyzed; 5. Was the study question; 10. Have the sources of estimates of health outcomes been described and justified and are they in line with the target population; 11. Were methods and assumptions used to extrapolate short-term results into final (medium- or long-term) results, which are described and justified; 12. If the estimates of health outcomes come from a clinical trial, does the research protocol reflect what would occur regularly in clinical practice; 13. If estimates of health outcomes have been systematically reviewed, has the quality of evidence been reported; 14. If the estimates of lealth outcomes come from observational studies or assumptions, was the use of this information due to lack of evidence of better quality; 15. Were the costs clearly stated; 16. Is the measurement of costs in line with the perspective information about the currency and the period in which the costs were collected; 19. If the costs were collected in different periods, was there an adjustment for inflation; 20. Were future costs and outcomes adjusted for the same discount rate, and was this adequate; 21. Was an analytical model used and is it appropriate to the objectives proposed in the study; 22. Do the states of health represented in the analytical model reflect the biological process of the disease and the consequences of the use of research technologies; 23. Was methodological uncertainty about the internal consistency of the model

*Adapted from: Silva EM, Galvão TF, Pereira MG, Silva MT. Estudos de avaliação econômica de tecnologias em saúde: roteiro para análise crítica. Rev Panam Salud Publica. 2014;35(3):219-27.

References

1. Jórdan-Sánchez F, Malet-Larrea A, Martín J, García-Mochón L, López del Amo M, Martínez-Martínez F, Gastelurrutia-Garralda M, García-Cárdenas V, Sabater-Hernández D, Sáez-Benito L, Benrimoj S. Cost-Utility Analysis of a Medication Review with Follow-Up Service for Older Adults with Polypharmacy in Community Pharmacies in Spain: The conSIGUE Program. PharmacoEconomics (2015) 33:599-610. DOI 10.1007/s40273-015-0270-2

2. Desborougha JA, Sachb T, Bhattacharya D, Holland RC, Wright DJ. A costconsequences analysis of an adherence focused pharmacist-led medication review servisse. International Journal of Pharmacy Practice (2011) 20:41-49. DOI: 10.1111/j.2042-7174.2011.00161.x

3. Bojke C, Sculpher M, Campion P, Chrystyn H, Coulton S, Cross B, Richmond S, Farrin A, Hill G, Hilton A, Miles J, Russell I, Chi KeiWong I. Cost-effectiveness of shared Pharmaceutical care for older patients: RESPECT trial findings. Br J Gen Pract (2010) January: 21-27. DOI: 10.3399/bjgp09X482312.