Activities to optimize quality and efficiency of medicines in Scotland

Brian Godman, Amanj Kurdi, Holly McCabe, Sean MacBride-Stewart, Chris F Johnson, Simon Hurding, Marion Bennie, Alec Morton

Introduction: The growing prevalence of non-communicable diseases, combined with greater recognition of the effectiveness of lipid lowering agents (LLAs), has fueled their increasing use in recent years. Similarly, increasing recognition of mental health and, arguably, societal expectations and pressures has driven appreciable growth in antidepressant prescribing in recent years.

Concurrent with this, growing resource pressures enhanced by the continual launch of new premium priced medicines necessitates reforms and initiatives within finite budgets. Scotland has introduced multiple measures in recent years to improve both the quality and efficiency of prescribing. There is a need to document these initiatives and outcomes to provide future direction. Method: Assessment of the utilization (items dispensed) and expenditure of key LLAs (mainly statins) and SSRIs between 2001 and 2017 in Scotland alongside initiatives. Results: Multiple interventions have increased international non-proprietary name (INN) prescribing (99% for statins and up to 99.9% for SSRIs). They have also increased preferential prescribing of generic versus patented statins with low costs for generics, reduced inappropriate prescribing of ezetimibe due to effectiveness concerns, and increased the prescribing of higher dose statins (71% in 2015). These measures have resulted in a 50% reduction in LLA expenditure between 2001 and 2015 despite a 412% increase in utilization.

Initiatives to reduce the prescribing of escitalopram as lack of evidence demonstrating cost-benefits over generic citalopram, along with high INN prescribing, achieved a 73.7% reduction in SSRI expenditure between 2001 and 2017 despite a 2.34-fold increase in utilisation. Concerns with paroxetine, and more recently citalopram and escitalopram following safety warnings, resulted in a considerable reduction in their use alongside a significant increase in sertraline. Conclusion: Generic availability coupled with multiple measures has resulted in appreciable shifts in statin and SSRI prescribing behavior and reduced ezetimibe prescribing, resulting in improvements in both the quality and efficiency of prescribing to provide future direction.

Funding
The production of this paper was facilitated by a grant to Alec Morton by the University of Strathclyde under the university’s New Professors’ Fund.