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National Therapeutic Indicators in Scotland and Financial Incentives

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Background with rationale

National Therapeutic Indicators (NTI) in Scotland use national administrative data to identify variation and drive quality improvement in GP practice prescribing. Twelve indicators were developed in 2011 and in 2012 practices were offered financial incentives to review their prescribing in two where there was greatest potential for improvement.

Main aim

To quantify the impact of 2012 NTI alone and in combination with financial incentives.

Methods/Approach

Six NTI were selected for analysis, aiming for heterogeneity in terms of whether the focus was quality of care (clinical) or cost effectiveness (cost). Impact was evaluated using segmented linear regression of time-series prescribing data, and changes in prescribing at 12 and 24 months after NTI introduction were estimated. Other national interventions expected to influence GP prescribing were also modelled.

Results

One selected NTI could not be modelled because of non-linear trends in the baseline period.

In practices not financially incentivised to review prescribing, improvements were variable. At 12 months relative changes were dipyridamole -31.9% (95%CI; -43.1 to -20.7), quinine -3.6% (95%CI; -7.2 to -0.1), non-preferred statins 6.2% (95%CI; 1.0 to 11.5), hypnotics and anxiolytics -2.9% (95%CI; -7.3 to 1.6) and high strength inhaled corticosteroids -1.0% (95%CI; -1.7 to -0.3).

In comparison financially incentivising practices resulted in larger improvements and improvements in all NTIs modelled. At 12 months relative changes were dipyridamole -65.3%

(95%CI; -68.4 to -62.2), quinine -52.3% (95%CI; -54.7 to -49.9), non-preferred statins -17.8% (95%CI; -21.9 to -13.6), hypnotics and anxiolytics -9.6% (95%CI; -12.6 to -6.7) and high strength inhaled corticosteroids -6.0% (95%CI; -7.3 to -4.8).

Conclusion

GP prescribing can be improved through feedback of national administrative data prescribing indicators. Impact on prescribing is larger when financial incentives to focus on particular areas of prescribing are additionally used.

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