Can MedicineInsight's general practice data improve patient care ?

Background

MedicineInsight is a NPS MedicineWise program aimed at improving decisions about medicine use and other clinical care in general practice by reviewing and reflecting on individual practice data.

Since early 2014, MedicineInsight has been extracting data from Medical Director or Best Practice software in participating general practices.

The data are compiled into practice reports around a specified topic, in this instance, type 2 diabetes. The report is used to aid facilitator-led practice meetings at the participating practices.

The outcome of the practice meeting is an agreed focus for improvement.

Figure 1. MedicineInsight in action

What we did

Facilitator-led practice meetings were held at 90 general practices, in which they reviewed their data against measures of best practice in monitoring and achieving selected targets for patients with type 2 diabetes. Follow-up meetings were held at 3 and 6 months to assess the impact of the MedicineInsight program on clinical practice.

Methods

▸ Measures of best practice (Table 1) were selected to:
  ▸ reflect current Australian guidelines,[1-3] and
  ▸ be relevant and retrievable from clinical software systems.
▸ Criteria were determined to identify all patients within a practice with type 2 diabetes who visited ≥ 3 times in the preceding 2 years, with a diagnosis of type 2 diabetes and/or prescriptions for oral hypoglycaemics

▸ At follow-up, we assessed changes in:
  ▸ rates of monitoring patients 3 months following initial visit and
  ▸ rates of achieving targets (eg, HbA1$_c$, BP) 6 months after initial visit
▸ Outcomes were improvements of at least 5% in at least one monitoring or target measure and were assessed at the both the practice and individual GP level.

What we found

Approximately one in four practices and one in two GP's experienced a 5% or more improvement in at least one measure of best practice

Table 1. Improvements in monitoring and targets for measures of best practice

Measures	Practices		GPs	
	% showing ≥ 5% improvement	Largest % increase in measure	% showing ≥ 5% improvement	Largest % increase in measure
Monitoring				
HbA1$_c$ levels of T2DM patients recorded*	9.1	27.6	23.0	40.0
BP of T2DM patients recorded*	5.9	13.0	15.4	31.3
Lipids of T2DM patients recorded†	6.4	21.8	17.3	26.2
Target				
T2DM patients achieving HbA1$_c$ level ≤ 53 mmol/mol*	9.1	20.7	21.7	30.8
T2DM patients achieving BP < 130/80 mmHg*	7.6	12.5	19.6	33.3
T2DM patients achieving total cholesterol < 4.0 or LDL ≤ 2.0†	4.3	12.6	15.8	20.0

* Recorded in the last 6 months. †Recorded in the last 12 months

Results

Changes in monitoring practice at 3 months
(included 141 MedicineInsight practices and 470 GPs)

Improvement in at least one measure of best practice in monitoring patients with type 2 diabetes was seen in:

▸ 23% of practices (n= 33), and

▸ 43% of GPs (n=201)

Changes in recorded targets at 6 months
(included 113 MedicineInsight practices and 377 GPs)

Improvement in at least one measure of best practice in monitoring patients with type 2 diabetes was seen in:

▸ 36% of practices (n=41), and

▸ 62% of GPs (n=232)

Conclusions

These are promising results. It is difficult to attribute this improvement directly to the MedicineInsight program in particular at the GP level because there was a high level of variability in the results.

Additional considerations in interpreting the findings include:
▸ practices select which measures they will focus on
▸ data recorded may not be complete
▸ small convenience sample of GP practices
▸ cross-sectional design.

What next?

In 2016, the MedicineInsight program on type 2 diabetes will be run again and the data compared further. Watch this spot.

References
1. Diabetes management in general practice 2012; RACGP.
2. Guidelines for preventive activities in general practice, 2012. RACGP.
3. Therapeutic Guidelines: Endocrinology, Version 4. 2009.

Independent. Not-for-profit. Evidence based. Funded by the Australian Government Department of Health.