Fast and well-reported implementation: Fast-IM and RE-AIM

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Abstract

Background Implementation in healthcare is often slow and poorly reported. Results include suboptimal outcomes and adverse consequences for patients. However, promising tools to remedy implementation speed and reporting already exist – such as the evidence-based, fast-track implementation model (Fast-IM) and the comprehensive RE-AIM (reach, effectiveness, adoption, implementation, and maintenance) reporting format.

Methods In combination, Fast-IM and RE-AIM may constitute a new best practice for fast and well-reported implementation. The aim of this article was to visualize the feasibility of the combination in practice via 3 examples concerning smoking cessation among patients, simulation-based training of healthcare professionals, and mandatory regulation.

Results Combining Fast-IM and RE-AIM is feasible and provides a useful overview of both implementation process and results.

Conclusion This article describes a new best practice for fast and well-reported implementation by combining Fast-IM and RE-AIM.

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Introduction

Implementation in healthcare is a global challenge, and a delay of upwards of 17 years has been described (1-2). Also, comprehensive reporting and follow-up on implementation-rates are rare (3). Failure to implement new evidence has severe consequences for patients such as suboptimal outcomes and adverse events (4), for instance by way of effective services not received (5-7) or sufficient training not undertaken by the staff that treat them (8).

Concerning implementation speed, the 1-year, fast-track implementation model (Fast-IM) has shown promise (9-11). Concerning comprehensive reporting of implementation results, the RE-AIM (reach, effectiveness, adoption, implementation, and maintenance) framework provides an easy and generalizable method for measurement of obtained results across healthcare (12-14) (3).

Combined, Fast-IM and RE-AIM might form a new best practice for fast and well-reported implementation.

The aim of this article was therefore to visualize the feasibility of the combination of Fast-IM and RE-AIM for fast and well-reported implementation via three examples concerning smoking cessation among patients, simulation-based training (15), and mandatory regulation.

Fast-IM and RE-AIM

The Fast-IM (Figure 1 and Table 1) was originally devised to support implementation of health promotion in healthcare in just 1 year. It was shown to deliver significant implementation results in an international, multi-center randomized trial (9-11).

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Figure 1: The Fast-IM with its 3 steps

Fast-IM appears robust across different clinical departments and countries as well as in tough-to-implement areas requiring active patient-involvement (12). It also appears acceptable and welcomed by staff, managers, and patients (16).

Table 1: The three steps of the Fast-IM in detail

1	PREPARATION	1 – 3 months:
	Capacity building	A small implementation group (staff/management) is established to lead the next steps and take part in a 4-hour workshop on using the Fast-IM
	Data collection	On the new evidence, clinical guideline, intervention, action or policy to be implemented
	Analysis + data-driven quality plan	On data and using it to drive quality plan priorities and milestones for evaluation
2	IMPLEMENTATION	1 year:
	Meeting milestones for improvement	Implementing using the plan-do-study-act cycle (PDSA) and following up every 3 months according to selected milestones from the quality plan
3	EFFECT	1 – 3 months:
	Data collection	Repeated (from step 1) and on all parameters regardless of priorities in the quality plan
	Data-driven reporting	On data from repeat collection using RE-AIM. Comparison with baseline (from step 1)

The RE-AIM framework of Glasgow and colleagues (3) (12-14) (Figure 2) is a practical tool for reporting on implementation. It has been widely-used in implementation science (3) (14) and supports internal and external decision-making. RE-AIM's original 2-year maintenance period is adaptable (13) and thus Fast-IM compatible (i.e. 1 year).

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Figure 2: RE-AIM with 5 dimensions to report on

Examples of use

To describe use of the best practice combination, Figures 3, 4 and 5 provide simple examples on use of Fast-IM for fast implementation and comprehensive RE-AIM reporting. The first example covers implementation of intensive smoking cessation intervention to smoking patients in a clinical department (Figure 3). The second example shows simulation-based training implemented for performance of colonoscopy (Figure 4). The third example shows information, e-learning and subsequent tests implemented to ensure mandatory compliance with the General Data Protection Regulation (GDPR) in a hospital (Figure 5).

Figure 3: Fast-IM and RE-AIM: Implementing intensive smoking cessation intervention (Int)

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Figure 4: Fast-IM and RE-AIM: Implementing simulation-based (sim) training for colonoscopy

Figure 5: Fast-IM and RE-AIM: Meeting the mandatory General Data Protection Regulation

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Conclusion

This article describes a useful and feasible best practice for fast and well-reported implementation by combining Fast-IM and RE-AIM. It was shown how the combination might look in practice, when implementing e.g. smoking cessation, simulation-based training or mandatory regulation. It was also shown how a department might be able to show their progress in terms of implementation over time, vis a vis selected 3-month milestones from the Fast-IM, and 1-year implementation results.

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