



Intravenous literature: Dixon-Woods, M., Leslie, M., Tarrant, C. and Bion, J. (2013) Explaining Matching Michigan: an ethnographic study of a patient safety program. *Implementation Science*. 8(1), p.70.

Abstract:

BACKGROUND: Quality and safety improvement initiatives in healthcare often display two disconcerting effects. The first is a failure to outperform the secular trend. The second is the decline effect, where an initially promising intervention appears not to deliver equally successful results when attempts are made to replicate it in new settings. Matching Michigan, a patient safety program aimed at decreasing central line infections in over 200 intensive care units (ICUs) in England, may be an example of both. We aimed to explain why these apparent effects may have occurred.

METHODS: We conducted interviews with 98 staff and non-participant observation on 19 ICUs; 17 of these units were participating in Matching Michigan. We undertook further telephone interviews with 29 staff who attended program training events and we analyzed relevant documents.

RESULTS: One Matching Michigan unit transformed its practices and culture in response to the program; five boosted existing efforts, and 11 made little change. Matching Michigan's impact may have been limited by features of program design and execution; it was not an exact replica of the original project. Outer and inner contexts strongly modified the program's

effects. The outer context included previous efforts to tackle central line infections superimposed on national infection control policies that were perceived by some as top-down and punitive. This undermined engagement in the program and made it difficult to persuade participants that the program was necessary. Individual ICUs' histories and local context were also highly consequential: their past experience of quality improvement, the extent to which they were able to develop high quality data collection and feedback systems, and the success of local leaders in developing consensus and coalition all influenced the program's impact on local practices.

CONCLUSIONS: Improved implementation of procedural good practice may occur through many different routes, of which program participation is only one. The 'phenotype' of compliance may therefore arise through different 'genotypes.' When designing and delivering interventions to improve quality and safety, risks of decline effects and difficulties in demonstrating added value over the secular trend might be averted by improved understanding of program mechanisms and contexts of implementation.

