



Dr Madalina Toma, SISCC  
 Dr Nicola Gray, SISCC  
 Dr Tobias Dreischulte, NHS Tayside  
 Ms Diane Campbell, NHS Tayside  
 Dr Sathish Sankarpani, University of Salford  
 Dr Steve MacGillivray, SISCC  
 Dr Jenna Breckenridge, SISCC  
 Dr Ania Zubala, SISCC  
 Prof. Mary Renfrew, SISCC  
 Prof. Bruce Guthrie, Research Lead, SISCC

## Research background

Work to systematically improve the quality of health and social care has steadily grown in scope and scale, but it is increasingly recognised that improvements can have consequences beyond their intended effects. The development of 'balancing measures' (which assist in identifying, measuring and monitoring unintended consequences) is important as they can support local teams to assess and improve care and to evaluate overall effectiveness of any changes. A rapid scoping review of existent literature showed that the terminology of "balancing measures" has not been widely used within the health and social care context and there is little guidance on what they are, or why and how they should be implemented.

## Aims

This poster presents preliminary findings based on a three phased mixed-methods study which seeks to explore the purpose, design and use of balancing measures in the Scottish health and social care quality improvement context and internationally.

## Data collection

15 semi-structured interviews (conducted by phone and face to face) and five focus groups (with 25 participants in total) were carried out with stakeholders from a wide range of organisations across Scotland, England and the United States, including academics, commissioners and providers of health and social care services, improvement advisors, policy-makers and regulators, voluntary and community groups. Data were audio-recorded and professionally transcribed. Field notes were generated following each interview and focus group.

## Data analysis

Framework approach was used to identify themes and develop conceptual schemes, drawing on the Diffusion of Innovations Theory (Rogers, 1995) and highlighting the complex relationships across and among different types of consequences. The data analysis was both iterative and interpretative with a coding template which evolved over the course of the analysis. Responses were summarised independently by two researchers and mapped according to a sequential process which suggests a series of key steps that can facilitate a better understanding of balancing measures in quality improvement.

## References

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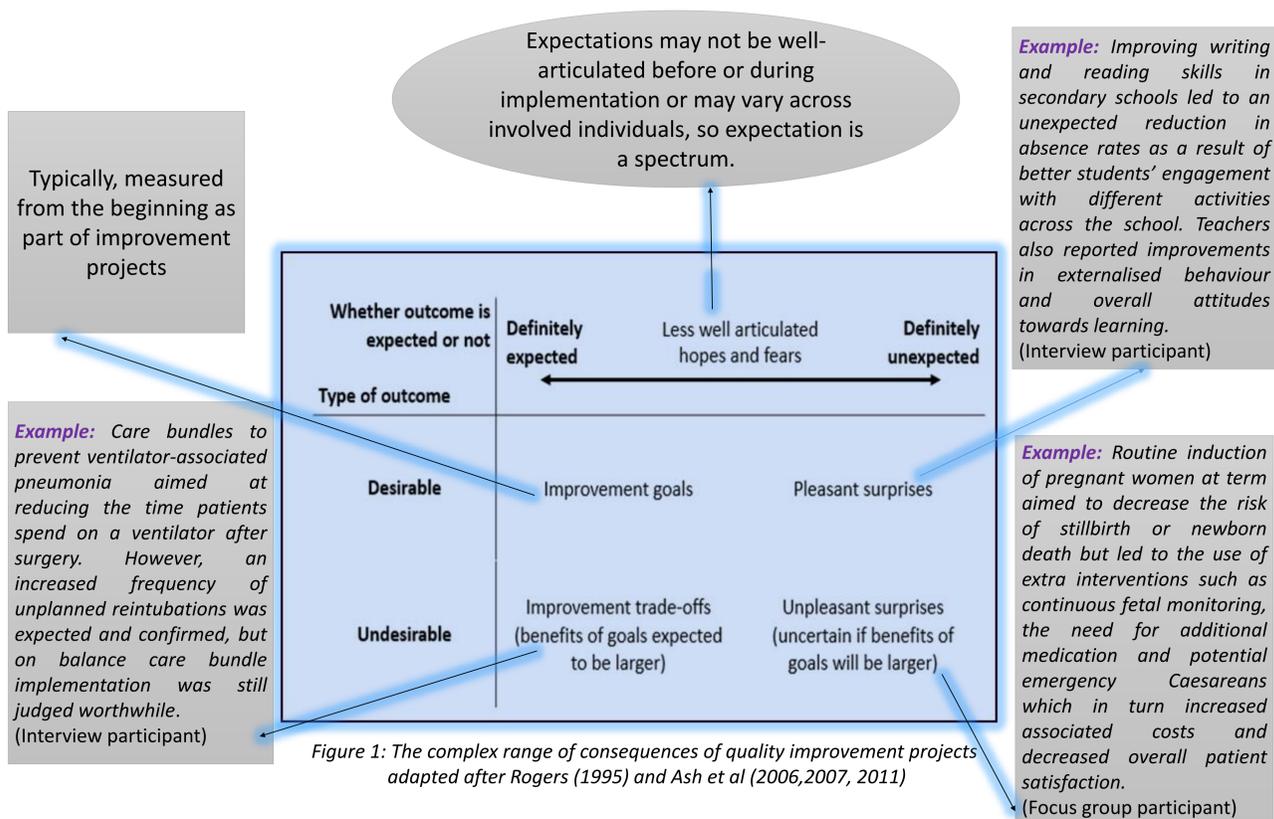
## For more information please contact:

Dr Madalina Toma, m.t.toma@dundee.ac.uk  
 Prof Bruce Guthrie, b.guthrie@dundee.ac.uk

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# The purpose, design and use of balancing measures in quality and safety improvement

The **Scottish Improvement Science Collaborating Centre (SISCC)**, led by the University of Dundee with NHS Tayside, aims to improve health and care by developing the evidence base for sustainable, large-scale improvement in health and social care. The SISCC brings together researchers, NHS staff, policy makers, educators, and the third sector from across Scotland and internationally in a coordinated and coherent way, to add value to existing investment and deliver a 'step change' in improvement knowledge and practice, and maximise benefit for Scotland and beyond. This study is part of 'Improvement Science Methods' Research theme which examines the use of measurement in health and social care quality improvement



## Stage 1-IDENTIFYING potential consequences

Improvement projects can have different type of consequences which can be expected (before implementation) or unexpected (and only apparent and therefore captured during or after implementation). Furthermore, consequences can sometimes be undesirable (trade-offs before implementation or unpleasant surprises during or after implementation) but also desirable (goals before implementation or pleasant surprises during or after implementation).

## Stage 2: DECIDING which of the identified consequences to actually measure

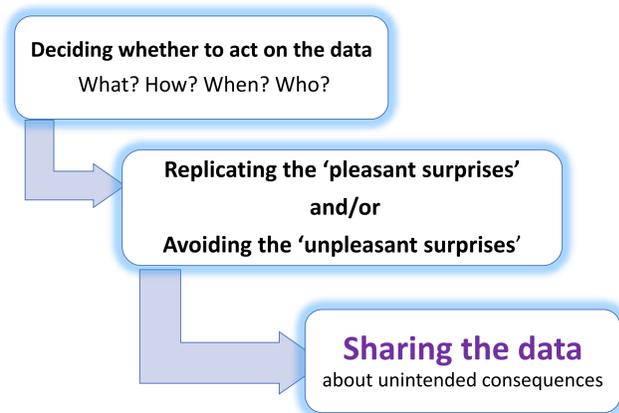
After potential consequences are identified (before, during or after the implementation) a decision has to be made as to whether they are important enough to be measured systematically. Several factors might need to be taken into account which includes comparing and balancing the severity of the potential risks associated with the improvement against the additional resource implications of collecting the data.

## Stage 3: DEFINING AND IMPLEMENTING balancing measures

Once the decision of measuring identified consequences has been made, improvement projects need to think about the most meaningful and effective data that needs to be collected (e.g. Routine data/Big data sets, Qualitative data, Quantitative data, Qualitative and/or Quantitative data already collected with other improvement projects)

## Stage 4: INTERPRETING the data

Identifying potential consequences, measuring and collecting the data is not enough. Understanding and interpreting the data appropriately will help to identify whether there were any significant unintended consequences as a result of the improvement and inform further action:



## Preliminary conclusions and next steps

These preliminary findings suggest that the current understanding of the complete spectrum of unintended consequences remains in its early stage, lacking consistency and rigour. A modified Delphi consensus study will be carried out to identify whether there is agreement about some key propositions that we have organised according to the four stages presented in this poster. The online survey is currently in the piloting phase with the results expected to provide more clarity in the meaning, scope and application of balancing measures in improvement projects, potentially influencing future use of these measures and accelerating patient safety progress.

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