# Defining the conditions that enable success: a qualitative study of antimicrobial stewardship in paediatric intensive care



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# Introduction

Traditionally, quality improvement focusses on deficits and failure, whilst successes and their causative factors are infrequently studied. Understanding the enabling factors for success is the first step to facilitating higher performance in healthcare.

# **Study Design**

Antibiotic prescriptions and the process of administering antibiotics were studied in paediatric intensive care, as part of a quality improvement project (Jones et al 2019). The QI project aimed to reduce antimicrobial consumption through improvements in antimicrobial stewardship. Episodes of success in processes related to antimicrobial stewardship were captured over a period of 6 months, and positive feedback given to the healthcare professional via excellence reporting and appreciative inquiry interviews. Of those healthcare professionals, we used appreciative inquiry techniques to interview:

- 28 prescribers
- 43 professionals administering medication

The responses from interviews were summarised, and then analysed by the study team using thematic analysis. The thematic analysis identified enabling factors of success as described by front-line staff.

#### Discovery

The impact of this study has been identification of a collection of themes demonstrating 'what good looks like' in a structured format. The themes identified are shown in figure 1.

#### System

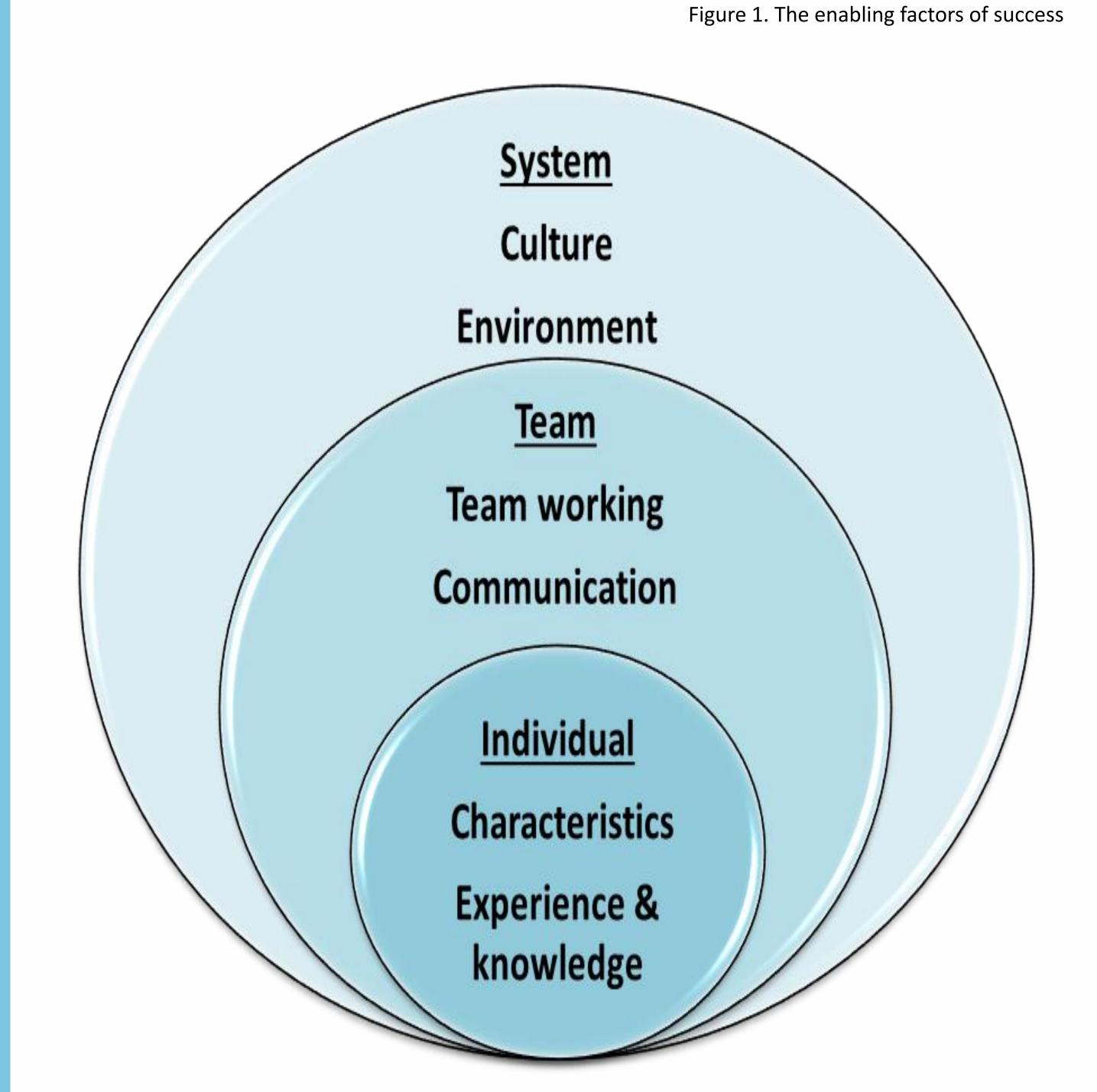
Ergonomic factors such as the physical tools and resources (e.g. functional / usable charts, guidelines), as well as the practically—suitable layout are environmental factors. Positive culture including the ability to safely raise concerns, a cultural expectation of high standards as well as motivation to provide good care fall into this category.

#### Team

The people in the team including multidisciplinary members, and their skill sets emerged as supportive factors enabling success. Non-technical skills including excellent non-verbal and verbal communication were also identified.

### Individual

Factors which participants self-identified were themed into this category. They included being meticulous and prioritising well, as well as the experiential and factual knowledge required to follow good antimicrobial stewardship practice.



# Dream

This study provides an example of how an organisation can identify the factors enabling success in their working environment. Once understood, the dream is that improvement work can be undertaken to strengthen the factors enabling successful outcomes.

The conditions that enable excellence could be up-scaled, with improvements in practise subsequently seen (e.g. improvements in rates of good practice, and/or errors in prescribing).

The process of identifying and up-scaling the factors enabling success is widely applicable across healthcare settings.

#### Destiny

An unintended benefit is that the process of interviewing is an intervention in itself as the process of appreciative inquiry generates and motivates good practise via reflection.

There may also a benefit to well-being as the process brings a sense of being valued to the interviewee.

We are in the process of publishing this work to share the findings.

#### References:

1) Jones AS, Isaac RE, Price KL, Plunkett AC (2019) *Impact of Positive Feedback on Antimicrobial Stewardship in a Pediatric Intensive Care Unit: A Quality Improvement Project,* Pediatric Quality and Safety, 4 (5), 206





