

Appendix 1 – Systems Thinking Workshop content

A) 'Systems thinking' workshop

The White Paper was sent to participants three weeks before the workshop as pre-reading material to familiarise themselves with the concept of a system focus and to facilitate system understanding. This was the core resource used for the adaptation and development of systems principles for healthcare.

Healthcare scenarios

1. A narrative description of a GP practice's medication reconciliation system after hospital discharge was provided. This included a description of the people involved in this system, the variability of work conditions (including demand and capacity, information availability and the protocol used) and interactions with other systems. Examples of when the system appeared to work well and when it did not were presented. This case was used to explore all of the original EUROCONTROL system principles.
2. A description of a patient safety incident when a patient received a vaccination inappropriately. The perspective of the people involved and the conditions under which they worked were described including the information they had, demand/ capacity issues and the availability of resources. The case was used to explore multiple perspective, how decisions made sense based on the system conditions and 'Just Culture'.
3. The results handling system was described and a case presented that demonstrated trade-offs due to competing goals, performance variability, how outcomes emerged from the interactions within the system and how trade-offs and performance variability can lead to both success and failure.

B) Appraisers' conference

- Data was presented from the analysis of the identification and management of sepsis within a regional health board. Qualitative data from administrative and clinical staff was presented at each step of the patient journey from contacting health services to being treated in hospital. Quantitative data from patients admitted to hospital was also presented. This allowed participants to examine multiple perspectives of the system, how conditions, interactions and flow influence decisions and where and when variability may be useful.