

## SAFETY MEASUREMENT AND MONITORING MATURITY MATRIX (SaMMM)

	PATHOLOGICAL	REACTIVE	BUREAUCRATIC	PROACTIVE	GENERATIVE
<b>PAST HARM</b>	Patient harm is viewed as an inevitable side effect of delivering healthcare treatment. No mechanisms exist to learn lessons from past harm.	Lessons are learnt from past patient harm only when media or regulatory pressure forces the organisation to investigate or review its past harm data.	Incident reporting, claims, complaints, HSMR, SHMI, routine databases, case note review etc. are used to measure past harm but the measurement culture focuses on ticking boxes to prove past harm measures are in place.	A range of past harm measures are used. Specialty-specific harm metrics exist. Incident investigation is used as a 'window on the system' not just to identify root causes. Reporting and learning from near misses or close calls is embedded.	Innovation takes place to introduce and refine past harm measures. There is a cultural norm that safety measurement should constantly evolve. Past harm measures that cross healthcare boundaries are in place.
<b>RELIABILITY</b>	Unreliable clinical systems, processes and pathways are accepted as the norm. Process reliability is not measured because it is not recognised as important.	Measurement of clinical system, process and pathway reliability is externally driven: The only reliability measures in place are those set nationally or by commissioners.	System, process and pathway reliability data is collected but the data is not used as a platform for improvement work. Reliability measures are sometimes misapplied leading to false assurance that processes are safe.	System, process and pathway reliability data is used to inform the focus of improvement work. There is a mature understanding of the strengths and weaknesses of reliability measures. Reliability measures are applied appropriately.	Poor reliability of systems, processes and pathways is viewed as unacceptable: Improvement work focuses on improving levels of reliability across ALL clinical and non-clinical areas. Innovation takes place to develop and implement measures of reliability that cross healthcare boundaries.
<b>SENSITIVITY TO OPERATIONS</b>	No importance is attached to observing, listening or seeking safety intelligence from frontline staff, patients carers.	Information on what is happening at the healthcare 'coal face' is only sought out when a serious incident or high profile patient harm occurs.	Safety walk-rounds, staffing level data, conversations with staff, patients, carers etc. are used but the true value of informal safety intelligence is lost because the culture focuses on ticking a box (to satisfy external regulators these methods are being used.	There is real appreciation of the value of soft safety intelligence gathered from observations and conversations with staff, patients and carers. Such safety monitoring data is actively sought and triangulated alongside other information to identify safety risks.	Real-time information systems have been implemented which take the pulse of the organisation on a moment by moment basis: This involves utilising real time patient, carer, and staff feedback systems, and intelligent data forecasting systems that predict patient flow and emerging risks.
<b>ANTICIPATION AND PREPAREDNESS</b>	No measures or methods to anticipate future harm are utilised (e.g. safety culture surveys, system safety assessment, training and sickness absence data).	Few measures or methods to anticipate future harms are utilised. Staff training and sickness absence data is collected but the organisation does not use it to predict future erosions in safety	Methods to anticipate future harm are in place. The focus is on demonstrating to external regulators and commissioners they are being used. There is no or little appreciation of their diagnostic value.	Safety culture surveys are used to diagnose emerging safety problems. Process mapping is routinely used to identify gaps in pathways. Staff training and sickness absence data is used to anticipate safety erosions and staff burnout.	Emerging safety risks are thwarted because measures that support anticipation provide real time data that is quickly acted on. Anticipating emerging safety risks is a cultural norm. There is an ability to view all types of safety data through the lens of 'will care be safe in the future:'
<b>INTEGRATION AND LEARNING</b>	There is no integration and learning from different sources of safety data because safety information is not collected or sought out by the organisation.	Safety data from past harm, reliability, sensitivity to operations and anticipation dimensions is only integrated after a serious patient harm occurs and/or at regulator insistence. Feedback to frontline staff on lessons learnt is patchy.	Safety dashboards are in place which meet regulatory and/or commissioner requirements. The attitude is 'job done' once the dashboards have been developed; there is no effort to improve them. Feedback and learning mechanisms look good on paper but do not work in practice.	Mature safety dashboards exist which integrate past harm, reliability and anticipation metrics. The importance of triangulating hard data from safety metrics with soft safety intelligence is understood. Lessons learnt reach frontline staff because good feedback mechanisms are in place.	Safety dashboards are based on real time data. Triangulation of safety metrics and soft safety intelligence is very mature: The culture is that safety is a never-ending journey. Lessons learnt are effectively shared with frontline healthcare teams and are shared with other organisations.

© Dr Jane Carthey. Please share citing Carthey, J. Safety measurement and monitoring maturity matrix. Shortly available at: [www.janecarthey.com](http://www.janecarthey.com). Based on Westrum's (1992) model of safety culture maturity and the Manchester Patient Safety Framework (Kirk S, Parker D, et al. (1997).