

THE UNIVERSITY of EDINBURGH

Edinburgh Research Explorer

Testing a systems methodology for improving children's safeguarding (Summary report)

Citation for published version:

Taylor, J, Armitage, G, Jerwood, D, King, W & Powley-Baker, W 2013, Testing a systems methodology for improving children's safeguarding (Summary report). NSPCC.

Link: Link to publication record in Edinburgh Research Explorer

Document Version: Preprint (usually an early version)

Publisher Rights Statement:

©Taylor, J., Armitage, G., Jerwood, D., King, W., & Powley-Baker, W. (2013). Testing a systems methodology for improving children's safeguarding (Summary report). NSPCC.

General rights

Copyright for the publications made accessible via the Edinburgh Research Explorer is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy The University of Edinburgh has made every reasonable effort to ensure that Edinburgh Research Explorer content complies with UK legislation. If you believe that the public display of this file breaches copyright please contact openaccess@ed.ac.uk providing details, and we will remove access to the work immediately and investigate your claim.







Testing a systems methodology for improving children's safeguarding

A SUMMARY OF THE PROCESS, INSIGHTS AND KEY RECOMMENDATIONS

SYSTEMS METHODOLOGY ADOPTED: Failure Modes and Effects Analysis (FMEA) **TOPIC:** Enhancing the recognition and response to children exposed to domestic abuse

1. BACKGROUND

1.1 What is FMEA?

Failure Modes and Effects Analysis (FMEA) is a systematic, prospective quality assurance methodology. It is used to identify potential vulnerabilities in complex, high-risk processes and to generate remedial actions before they result in adverse events. Systems models are already used in other sectors (e.g. engineering – particularly aviation and nuclear power) to develop reliable organisations that can operate at a high level of safety, particularly in complex situations. FMEA is increasingly being used to assess and improve the safety of complex healthcare processes. The models are based on the premise that blaming individuals for errors or mistakes is rarely a productive way of improving practice. A systems approach focuses specifically on understanding professional practice in context and drawing on human factors research to (re)design processes and procedures. It acknowledges humans have both strengths and weaknesses and seeks to focus on achieving the most effective interaction between people, processes and their work setting so that vulnerabilities and risk in the system can be kept to a minimum. FMEA is thus a proactive prediction of risk rather than a retrospective exploration of negative outcomes. To be effective it is a multidisciplinary exercise drawing on diverse knowledge and perspectives of complex systems.

1.2 Why we did a FMEA

Child protection concerns are often difficult to articulate and require professionals to process complex information. Learning about professional practice to date has relied heavily on an appraisal of Serious Case Reviews (SCRs) which take a retrospective review of a specific case where an adverse event has already occurred. In 2011 the *Munro Review of Child Protection*¹ called for a range of systems approaches to be tried and tested within child protection contexts. The system of SCRs is not always effective in identifying existing good practice, nor does it promote reflection on systems overall. Munro highlighted that there should be a stronger focus on understanding the underlying issues influencing

¹ Munro E. 2011. The Munro Review of Child Protection. Final Report – A Child-Centred System. Department for Education: London.





THE UNIVERSITY OF EDINBURGH / NSPCC child protection research centre



professional behaviour. Within this context, FMEA offers a useful methodology: rather than apportioning individual blame, it seeks to generate collective learning including identifying remedial actions that can prevent adverse events within complex and high-risk processes.

The 2011/12 annual plan of a Local Safeguarding Children Board (LSCB) in England included a commitment to testing a systems approach within a children's safeguarding setting. As a charity working to end cruelty to children in the UK, the NSPCC is committed to using its limited resources in a manner that can have maximum impact. The NSPCC focuses particularly where abuse is most extreme and where children are most at risk or at their most vulnerable. In 2012 the (above) LSCB worked with the NSPCC on this unique initiative to apply a systems methodology – FMEA – to a children's safeguarding setting. To our knowledge this is the first time FMEA has been used in this way.

This paper outlines the steps, learning and recommendations from this process.

1.3 Identifying the topic

Although there are several variants, FMEA has a clearly defined process and works best when applied to a discrete problem or area. For effectively testing this model within a children's safeguarding setting, it was important to determine a specific focus for this project. Given the adverse and long-term consequences for children living with domestic abuse, this FMEA addressed **the process for recognising a child exposed to domestic abuse within the Local Authority**. It involved identifying potential errors and corrective actions that could be applied to improved practice and systems relating to these children.

2. WHAT WE DID (FMEA ACTIVITY)

A multi-disciplinary, multi-agency group of nominated front line practitioners and managers undertook the FMEA in seven group meetings (each 3 hours) between July and October 2012. An experienced NSPCC facilitator shaped the process with support from a scribe and strategic input from two consultant FMEA experts. By cross-examining an error-vulnerable process in a novel way, a range of cross-professional, whole systems insights and recommendations were generated. These are inevitably grounded the perceptions and experience of participants². The group explored the five steps of FMEA (see below), participated in an evaluation of the process and were consulted in the writing of a report.

FMEA process	The Local Authority's FMEA to evaluate/review the process for recognising a child exposed to domestic abuse
1. Map the process under evaluation to identify its component steps.	Ten clear steps (with additional sub-steps) were mapped as the process for recognising a child exposed to domestic abuse – from receiving information through to confirmation of a referral (see Appendix for the process map). The mapping involved consolidating definitions of key terms, integrating different systems operating across the different agencies and attempts to capture the cyclical and ongoing nature of the process. Additionally, 31 organisational and contextual factors were identified as influencing the process of recognising a child exposed to domestic abuse.

² Results and recommendations of (the) FMEA are based on the perceptions of the established group and are not necessarily representative of all professionals working in this area.

2. Identify 'failure modes' (potential errors) for each process step.	The team interrogated each of the steps to identify 'what could go wrong that would prevent this step from happening'. This resulted in a list of 121 'failure modes' across different domains including issues
	pertinent to workforce, communication and quality assurance.
3. Numerically score the	Typically FMEA includes a step scoring each of the failure modes in
failure modes to prioritise	terms of their likelihood and severity as well as considering the
them according to the risk they	sufficiency of existing 'controls' to guard against the failure modes
pose.	occurring. On reflection and taking into account recent debates in the
	FMEA field relating to the distorting value placed on numerical
	prioritisation, the group members determined scoring would be difficult
	or not feasible in the context of child protection.
4. Identify possible causes	The team identified 97 individual causes for the failure modes or
for the failure modes.	potential errors. These could be grouped into different themes
	including: lack of knowledge or guidance; difficulties with
	documentation and communication; and the dynamics involved in
	joined-up working.
5. Generate corrective	The team identified 34 corrective actions that could be applied to the
actions to address the	process of identifying a child in the Local Authority exposed to domestic
identified causes.	abuse. These were organised into five sections (see section 3).

3. WHAT WE LEARNED (FINDINGS)

3.1 Insights about our work and processes

GENERATING A MAP AND CORRECTIVE ACTIONS: The FMEA model was found to be a useful tool for analysing practice in the setting of domestic abuse. The group was able to produce an agreed process map and generate immediate and longer-term corrective actions. It shows that given a protected space, a group of multidisciplinary, multi-agency professionals are able to agree on the steps taken in recognising a child exposed to domestic abuse. The map (see Appendix) holds value in its own right as a tool to reinforce and guide practice as well as providing a platform for discussion and review of current perceptions and processes.

CORRECTIVE ACTIONS: Through this FMEA, 34 corrective actions were identified which could help improve the process of identifying a child exposed to domestic abuse within the Local Authority. The corrective actions have been grouped into five sections:

- 1. Policy and procedures
- 2. Information communication technology (ICT)
- 3. Workforce training, learning and development
- 4. Professional awareness and practice tools
- 5. Coordination and quality assurance.

IMPLEMENTING CORRECTIVE ACTIONS: The corrective actions could be readily divided into those that could be (and were) applied immediately and those to be implemented in the mid- to long-term following approval and/or resourcing. The implementation and evaluation of the corrective actions needs

to be monitored to determine the extent to which the recognition (of a child exposed to domestic abuse) has been enhanced across the multi-agency network.

PROFESSIONAL BENEFITS RELATED TO THE TOPIC: The group conducting the FMEA reported enhanced multidisciplinary, multi-agency learning around domestic abuse and corrected some inaccurate perceptions and perspectives. It has been a useful tool for generating a detailed understanding of the potential risk and vulnerabilities within these high-risk situations. The nature of relationships between professionals has been strengthened and participants reported their approach to domestic abuse was sharpened – suggesting an enhanced commitment to safeguarding children at the earliest point of concern. The FMEA demonstrated that professionals can become critical friends who positively challenge each other's culture and process in a child-focused way.

3.2 Insights about the FMEA process

INTER-PROFESSIONAL DYNAMICS AND BENEFITS: The process of different professionals coming together as a multi-agency network to explore common issues is a very strong model. The process was time-consuming, demanding and stimulating – affording a rare opportunity for a group of multidisciplinary professionals to reflect deeply on practice. It provided a useful and detailed window on multi-agency work for those involved and afforded a cross-fertilisation of knowledge and approaches. In addition to being a useful tool for interrogating practice and generating remedies, FMEA is also a practical response to repeated calls (within child abuse enquiries and SCRs) for more joint-working between professionals. Joint-working took place both within and beyond the FMEA meetings.

THE FMEA GROUP: To generate accurate information and to ensure insights are embedded within practice, the FMEA process needs both practitioner and managerial input and support. This ensures reflections can go beyond the surface explanations and yield the depth of analysis needed to bring about real learning. An enquiring, facilitated environment created the stimulus for correcting and strengthening knowledge and practice. It is important to have inclusive representation within the FMEA group to ensure both rounded and grounded reflections. To mitigate against bias, the process could be further strengthened by including peer-review with other colleagues as part of finalising the map, failure modes, priorities and corrective actions. This would ensure the perceptions of the group can be verified by a wider cohort of professionals which would serve to both share the learning and strengthen its applicability.

TIME: FMEA is clearly beneficial and leads to significant insights; it is also time and resource intensive. It is noteworthy that conducting a *multi-agency* FMEA – as opposed to FMEA within a single organisation – increased the complexity of the process and the time needed to complete the steps. Additional time was also required to discuss and clarify generic terms and language used differently across the agencies.

FOCUS: When conducting FMEA a narrow focus is essential. The group recognised this FMEA could have been strengthened by further narrowing the focus of the analysis (e.g. limiting the age group of children 0-5yrs) and/or looking more deeply at one of the contextual aspects identified (e.g. ethnicity or disability). More honed analysis could have generated more specific learning. One of the ways in which the group selected to limit the focus of the FMEA was to restrict 'referral' to apply solely to children's services. This resulted in a group of children not being included in this analysis (i.e. those who would be part of the Local Authority's CAF arrangements – who would not meet the threshold for a service from the Local Authority, but may be eligible to receive intervention from a LSCB partner agency).

PRIORITISATION: The process generated significant data and while arbitrary scoring can and should be avoided, it would be useful to develop an alternative mechanism to ensure the corrective actions can be prioritised in relation to the likelihood and severity of the failure modes identified.

ANALYTICAL AND PROACTIVE LEARNING: The group welcomed adopting a model such as FMEA because it afforded a prospective approach where professionals were able to step back from day-to-day demands to share and affirm practice. The model also enabled critical analysis of their practice and systems without blame and the formation of (non-defensive) insights and strategies.

APPLYING A SYSTEMS APPROACH TO SOCIAL PROCESSES: Professional judgement and practice wisdom are integral to decision-making in child protection cases and of course may be influenced by personal biases. As such it was challenging to integrate these factors within the systems approach of this FMEA. Related to this, the group repeatedly highlighted the considerable extent to which social processes affect actions. Further work is needed on how best to bring more sophistication to managing the otherwise 'inter-personal systems' that workers must manage, to understanding the impact of personal opinion on system failures, and to maintaining professionalism throughout.

SHARING LEARNING: It is important that the learning generated from applying systems approaches across the country is captured and made accessible to all so learning can be built on systematically. FMEA is a methodology that can be reused and reviewed to monitor change and support continued practice improvement and quality assurance. In this way continuous learning and improvement can be attained.

4. **RECOMMENDATIONS**

4.1 Recommendations for the Local Authority in relation to improving services for children exposed to domestic abuse

Sharing the learning and taking corrective actions forward is key to maximising the time invested in this process. Given the rich and critical information produced by this FMEA, the LSCB could capitalise on this work by agreeing which corrective actions are needed in which areas and to continue and extend its use.

Two key steps are recommended:

- 1. The process map (see Appendix) could be interrogated, refined and agreed by a wider representation of professionals. This might include agreeing how best to prioritise the most severe and likely failure modes and their related corrective actions.
- 2. The LSCB may develop an action plan to deal with immediate concerns and detail the implementation, monitoring and evaluation of corrective actions identified so that it is possible to determine the impact of this work for children and young people across the multi-agency network.

Further recommendations that emerged from the data include:

- Enhance staff development and awareness of the implications for children living with domestic abuse through training and bite-sized communications
- Interrogate and improve administration and communication processes that have been identified as triggering delays and obstacles in the referral pathway

- Review support and supervision mechanisms for less confident staff
- Consider how best to encourage, establish and maintain a culture of enquiry
- Review training across agencies in order to consider universal guidance regarding the content of domestic abuse training.

4.2 Recommendations for others adopting FMEA

The group in this Local Authority have demonstrated how FMEA can be applied within a children's safeguarding setting. Other Local Safeguarding Children's Boards (LSCBs) may benefit from further exploring this model in related, complex settings. Some recommendations for applying this model within social care:

- Ensure the theme for analysis is discrete and narrowly defined
- Ensure an inclusive group/team for analysis and build in a process for allowing a wider group of professionals to interrogate emergent insights
- Build in contingency for detailed discussion on definitions and processes especially when discussing complex, interrelated, multi-agency systems
- Determine a mechanism for prioritising data generated (e.g. at the 'failure modes' step) that aligns more comfortably with systems that are more social and value-laden than some social-technical systems (i.e. engineering, where FMEA was originally developed and applied)
- Build in mechanisms for sharing insights so that others can benefit from the time and commitment invested in the process
- Build in mechanisms for relevant senior managers of agencies to review the findings to determine which corrective actions will be adopted, resourced and systems refined accordingly.

5. CONCLUSION

This has been a unique opportunity to adopt a systems methodology to children's safeguarding. It has generated significant learning both in terms of the topic – recognising a child exposed to domestic abuse – and in terms of applying FMEA within a new context. The NSPCC FMEA in this Local Authority has made an exciting contribution to learning in child protection and addresses some of Munro's challenge to explore the use of a systems approach. It was useful on a number of levels, including:

- the FMEA generated a significant number of corrective actions locally for the LSCB to consider in its response to children exposed to domestic abuse
- there has been significant organisational and inter-agency learning from undertaking a multiagency FMEA
- the FMEA process was time-consuming, useful and motivating and highlighted the high degree of commitment from all participants.

Child protection concerns are often difficult to articulate and people need help in processing complex information. This FMEA was a collaborative, multidisciplinary and systemic process to examine and address – in a proactive way – things that can go wrong when seeking to recognise children exposed to domestic abuse. This has been a challenging and deeply valuable process. Both the LSCB and the NSPCC have highlighted their commitment to implement recommendations and learning from this work.

APPENDIX FAILURE MODES AND EFFECTS ANALYSIS (FMEA) PROCESS MAP

The process for recognising a child exposed to domestic abuse within a specific Local Authority September 2012

