



Department  
for Education



Responsible  
Technology  
Adoption Unit

# **Ethics triage self- assessment tool to identify risks**

**For local authorities developing data  
analytics tools in children's social care**

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## Summary

The ethics triage is a self-assessment tool. We recommend that you complete this for any analytics projects before development of a tool begins. Making the 25 assessments in the triage will help you better:

- identify specific risks associated with the tool, and inform how you respond to or mitigate risks.
- understand what proportionate data governance looks like, and where you can find specific advice and information to address the specific risks.
- respond to relevant impact assessments, including data protection, equality and children's rights assessments.

## Who this publication is for

We recommend that you complete this triage as a team, which may include developers (internal or third party), data practitioners and information governance representatives.

## How to use this publication

Before completing the ethics triage, you should have a high-level understanding of the use case you have agreed to explore, which includes:

- understanding of your data maturity
- the intended value of your use case, who is likely to benefit, and how
- the type of analytics (descriptive, diagnostic or predictive) that you will use
- the datasets needed, and a general understanding of their quality

To complete the triage:

- **consider the prompts below and note your answer.**
- **read and follow the corresponding explanatory note.**
- **document your result - and the steps you are taking to mitigate these risks - in your impact assessments.**

# Ethics triage self-assessment tool

The tool contains 4 sections, and you should work through each one in turn.

## Novelty

This section considers the ‘novelty’ of the tool that you are developing.

1. Decide which type of data analytics your tool will use:

- descriptive analytics to help understand what has happened
- diagnostic analytics to help understand why things are happening
- predictive analytics to help estimate what is likely to happen

The **introduction to data analytics** has more information about these types of data analytics tools.

You should only explore developing a predictive analytics tool where you have high data maturity. Developing a predictive analytics tool will require:

- Advanced technical expertise, and robust testing and evaluation ahead of deployment
- Strong engagement and support from affected stakeholders
- Robust governance mechanisms including an external oversight group who can effectively scrutinise and challenge throughout development

Any form of machine learning should only be undertaken by experienced data scientists with relevant experience. You should note that initial evaluations of [machine learning](#) have not demonstrated effectiveness in identifying individual risks to cohorts of children.

2. Describe your previous experience using tools with the same type of data analytics.

If you have used tools before, note whether:

- you developed and used them
- you used them, but a third party developed them for you

Where you haven't previously developed tools before, it's important that you are developing a tool which matches your data maturity. This is likely to be a descriptive or even a diagnostic tool.

The **exploratory phase in the guidance for developing data analytics tools** has information on data maturity.

Alternatively, you may need to engage with third parties to support you. The **explainers chapter on procurement** has more information on whether procurement is suitable for you.

If you have not used tools before, **step 3 is not relevant to you. Go straight to step 4 when you have finished this step.**

3. Assess whether the tools you previously used were effective.

Consider the evidence that your tools:

- were accurate
- led to better outcomes for children and families
- improved decision-making

Consider how strong this evidence is.

If your tools weren't effective, it's important to understand why.

If there isn't evidence that a similar tool was effective, it's important to proceed with caution and identify how or why your context might be different. You should consider whether:

- the intended benefits are significant to justify the risks
- you have the resource, capacity and expertise to make sure that robust governance and scrutiny is in place
- you develop a different tool

If you do proceed, you should make sure that:

- there is strong engagement with end users and affected stakeholders throughout the process
- you have established independent scrutiny which includes technical experts
- you complete thorough testing and evaluation ahead of any deployment

4. Consider whether you are aware of any local authorities who have developed or used a similar data analytics tool that you want to develop

If you know of any other local authorities, you should try to speak to the teams who developed these similar tools, and understand how they managed any ethical risks arising across the project. In particular, you should understand any results of evaluations carried out on similar projects to understand how effective the tool was.

If you were unable to identify any other local authorities, you can proceed to step 7.

5. Assess whether the tools developed by other local authorities were effective.

If these tools weren't effective, it's important to understand why.

If there isn't evidence that a similar tool was effective, it's important to proceed with caution and identify how or why your context might be different. You should consider whether:

- the intended benefits are significant to justify the risks
- you have the resource, capacity and expertise to make sure that robust governance and scrutiny is in place
- you develop a different tool

If you do proceed, you should make sure that:

- there is strong engagement with end users and affected stakeholders throughout the process
- you have established independent scrutiny which includes technical experts
- you complete thorough testing and evaluation ahead of any deployment

6. Where you have identified similar tools that have been deployed in the past, assess whether they have provoked controversy or concern.

This could have been externally, drawing criticism from the public, media, civil society groups, or independent researchers; or internally, drawing criticism from child or family practitioners, information governance teams, or senior management.

Should you recognize that this has occurred, you should understand what the concerns were, if possible, by speaking directly with those who developed or managed development of the tool.

Where there is evidence that public opinion would strongly oppose the tool, you should carefully consider how you will communicate transparently.

The **explainers chapter on public communication** has more information.

## Data

This section considers the risks surrounding data, and how it will be used.

7. Assess your understanding of the quality of the data that will be used to develop the tool.

This includes data held by the LA, and data provided by external partners.

If you are unclear or not confident, it's important that you understand the quality of the data that will be used to develop the tool.

Chapter 3 on **choosing a data analytics solution in the guidance for developing data analytics tools** has more information on assessing your data quality.

8. Assess whether you have confidence in the data quality being sufficient for the tool to perform as expected

If you are unclear or not confident it's important that you take steps to improve the quality of the data that will be used to develop the tool.

The **explainers chapter on data quality** has more information on improving your data quality.

9. Assess whether the (input) data used by the tool includes personal information about children and families

10. Assess whether the (input) data used by the tool will include sensitive information about children and families.

11. Assess whether the (input) data will include:

- All/ majority of children in England
- All children/ families in the local authority area
- Children/ families in the geographic area for which data indicates they may be vulnerable
- Children/ families in the local authority area for which data indicates they may be vulnerable
- Only children / families currently supported by children's social care

12. Assess whether insights (output) will identify individual children and families or whether data be de-identified and/ or aggregate

If your tool will include personal or sensitive information on children or families, any of the groups listed at step 11, and the data will not be de-identified or aggregated, you should be particularly careful.

It's important that you:

- Incorporate the views and perspectives of affected stakeholder groups. The **explainers chapter on co-design and communication** has more information;

- Take steps to secure and protect data. The **explainers chapter on data sharing** has more information about anonymising, securing and protecting data.

13. Where tools using this type of data analytics have been used before, confirm if they were assessed for algorithmic bias.

(I.e. was the accuracy and performance of the tool assessed and compared for different demographic groups, particularly those who have protected characteristics as specified by s.149 Equality Act 2010?)

14. When an assessment was done, check if it indicated that the tool adversely impacted or discriminated against those with protected characteristics.

During steps 13 and 14, if you determine that an assessment has not been conducted, or you are uncertain, or if an assessment has shown a negative impact.

If there is evidence of bias, it's important to:

- proceed with caution (if at all)
- identify how or why your context might be different.

It's important that you complete thorough and robust technical testing and evaluation ahead of deployment to make sure that:

- The quality of the data you are using is sufficient to develop accurate insights. The **explainers chapter on data quality** has more information about assessing and improving data quality.
- There aren't unintended or other adverse impacts on protected characteristics. The **explainers chapters on mitigating bias** and **testing and evaluation** has more information on testing for algorithmic bias.

## Users

This section considers the end users of the tool.

15. Assess your data maturity

You may find the Local Government Association's data maturity self assessment tool or DLUHC's Early Help System Tool helpful to understand your data maturity out of the following options:

- Basic
- Intermediate
- Advanced



- Expert

If you assessed your data maturity as BASIC

This means that you are unlikely to be able to develop a data analytics tool in-house.

However, it doesn't mean you can't develop or use a tool. You may procure expertise from third parties including academics, private sector developers or non-profit organisations.

The **explainers chapter on procurement** has more information.

If you assessed your data maturity as INTERMEDIATE

You may likely be able to develop a data analytics tool in-house.

However, you should focus on the possibilities for descriptive and diagnostic analytics. You should avoid developing a predictive tool, as it's unlikely that you will have the technical capability and data governance processes required.

You can also focus on improving your data maturity, **chapter 1 on the exploratory stage in the guidance for developing data analytics tools** has more information.

16. Assess if the intended users of the tool have experience using and interpreting similar tools

17. Assess how many people will use/ receive insights from the tool, and whether any of the following groups are included:

- Social care practitioners within the local authority
- Social care managers within the local authority
- Senior leaders within the local authority
- Practitioners and managers working in external partners and agencies (e.g. outside the local authority)
- Data analysts within the local authority

18. Assess how regularly these groups will use the tool from the following options:

- Once/ one off
- Once a month
- Once a week
- Integrated into daily practice

Whatever your findings during steps 16, 17 and 18:

It's important to make sure that you design tools collaboratively with end users to make sure that the tool meets their needs.

**Chapter 2 on problem identification and design in the guidance for developing data analytics tools** has more information on including end users in the design process.

19. Assess whether insights will be shared outside of the local authority

If insights will be shared outside of the local authority

Make sure that you have appropriate data governance in place, and methods to improve security and restrict access to data. You should ensure that any data shared complies with the Data Protection Act 2018 and the GDPR. The **explainers chapter on data sharing** has more information.

You should also refer to the **explainers chapter on co-design and communication** to make sure that any insights are valuable and able to be integrated effectively into a partner organisation.

## Impact

This section considers the potential impacts of the tool on the public.

20. Assess whether any of the following groups will be directly affected by the tool.

- All children or families in the local authority area
- Only children or families that are known to and/ or are currently supported by safeguarding partners and/ or children's services
- Children or families previously in the care system
- Child and family practitioners and others working in children's services

21. Assess what type of action/ outcome the tool will support

- Identifying individual children who require early help/ support to children in the community
- Front-door, in informing the referral of a child to social care
- Risk assessment stage, to help assess the safety of a child or the safety of a child to remain at home
- Performance reporting/ benchmarking
- Informing resourcing or funding allocation/ prioritisation

- Supporting project/ programme evaluation
- Conducting research which informs wider policy and practice

22. Assess at what stage of children's social care the tool will be used

- Early help
- Referral stage
- Assessment stage
- When a child is on a child protection plan
- When a child is in care
- None of the above

23. Assess whether you intend for the tool to be scaled or expanded to include any of the following:

- Further areas/ geographies,
- Collect further datasets,
- Include a larger number of the population,
- Use more advanced analytics,
- Sharing with further external partners

If you intend to scale the tool

If the scope changes or evolves, it is very important to make sure you are amending and updating data governance processes to give sufficient consideration to adaptations.

This includes, but is not limited to:

- Engaging with end users and affected stakeholders to seek their views on the proposed amendments
- Revisiting the **ethics triage** tool, and identifying if governance processes need to be strengthened
- Engaging with information governance teams to make sure that it meets legal requirements
- Engaging with any oversight or scrutiny groups for input and challenge. Where a tool is being scaled, this should include external experts

- Reviewing and updating any impact assessments, including a data protection impact assessment
- Reviewing and updating the information you provide to the public

24. Assess whether your tool will include either of the following:

- A tool that provides little opportunity for a practitioner or user to reach their own conclusions. For example, a tool which automatically refers children for assessment, without a professional considering the evidence
- A tool which makes predictions related to individual children or families

If you identified the tool will include these functions

These are both high risk projects, and we would advise against continuing.

If you DO continue, you should very carefully consider whether:

- the intended benefits are significant to justify the risks
- you have the resource, capacity and expertise to make sure that robust governance and scrutiny is in place.

We strongly recommend that you:

- Establish independent, expert oversight. The **explainers chapter on governance and oversight** has more information.
- Make sure that any tool is subject to rigorous independent evaluation in advance of deployment.

Engage throughout with children's services teams, service users and experts by experience. The **explainers chapter on co-design and communication** has more information.

## How to use your answers

Through answering these questions, you should now have a detailed summary of your proposed data analytics tool, its risks and benefits, and who it will affect. You should:

- **Record the information identified in the ethics triage in your DPIA**, outlining how you will address or mitigate any risks identified. You may decide that some risks are too high to justify developing the tool.
- Read the **explainers chapters** that have been flagged for particular attention.
- Put appropriate governance in place if your tool is 'high risk'. This can include:
  - Making sure that you have the right level of technical experts in the development and testing of the tool to support robustness.
  - Input from child and family practitioners throughout the process to support trust
  - Establishing an oversight or ethics group to provide input and challenge at the design, development and implementation stages
  - Thorough training for users, particularly where users are child and family practitioners and are responsible for interpreting the results/ insights
  - Independent evaluation to make sure that the tool is effective, and regular monitoring
  - Considering whether any part of your proposed solution could be adapted to reduce risk.



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