

# Essex Data: Platform (formerly DPaRS) - Evaluation and Measurement Framework

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## 1 Introduction

This document sets out the framework for the evaluation of the Essex Data: Platform (formerly DPaRS).

The research and evaluation outputs are expected to contribute to the following outcomes. These are further described in the logic model for the Essex Data: Platform Programme which is included in Appendix 1.

- Enhanced ability and culture of partners to share and analyse data
- Increased capacity to deliver early intervention and shift resource from reaction to prevention
- Increased capacity to evaluate and understand the longer term impact of transformational activity

## 2 Research Activities

The following research activities are proposed for the evaluation of the Essex Data: Platform.

We propose to collect data via the following means:

- Prototype specific data:  
Working closely with data owners at ECC to define data and models that will allow the measurement of the impact on service users of the use of the risk model in the commissioning process. The data, models and desired impact will be specific to each prototype.
- Survey:  
A survey of partners and potential partners will allow us to assess perceptions and utility. The survey will ask questions regarding tool flexibility, accessibility, ease of use, value, relevance, confidence in data security, hopes for the tool, and whether the tool is helping (in expected or surprising ways).  
The survey will allow for and request open-ended answers for narrative reports.

The survey will request self-reported input of partner intervention behaviour in the community, beginning prior to tool implementation. This will allow us to determine whether priorities/activities shift after exposure to the tool.

We will periodically administer the survey to users over particular time intervals (perhaps quarterly), and feedback results to platform managers.

- Platform data review:  
Perform periodic user tests with platform to assess data quality. Feedback results to platform managers.
- Web analytics:  
Use ISP addresses and user login information to track platform usage by user over time.
- Analysis of data share agreements  
Track number of partners who join data sharing agreement, who pool agreements, and who do not share data with the Council.  
Track breadth and depth of data shared by each partner.  
Track quality of data shared by each partner (correct format, cleanliness).

Outcome	Contributory primary research activities	Contributory secondary research activities
- Enhanced ability and culture of partners to share and analyse data	Survey	Web analytics Platform data review Analysis of data share agreements
- Increased capacity to deliver early intervention and shift resource from reaction to prevention	Prototype specific data Survey	
- Increased capacity to evaluate and understand the longer term impact of transformational activity	Prototype specific data Survey	Web analytics Platform data review Analysis of data share agreements

### 3 Research Outputs and Outcomes

We expect to generate the following research products:

- Data set of survey responses and web analytics (linked by user)
- Interim Progress Report Sept 2017

- Final Assessment Sept 2018

## 4 Research plan

The evaluation activities will be structure in three stages.

### Stage One: Evaluation Design Stage

Timing: Sept 2016 – Feb 2017

#### Objectives:

- 4.1 Agree the approach presented in this FW.
- 4.2 Further analyse, working closely with leads at ECC, the current modelling for prototype 1, school readiness in Vange, presented in the business case:
  - Review assumptions on which case predictions were made;
  - Gather/request any information necessary to fully understand predictions;
  - Revise predictions as necessary, based on information gathered
  - Determine which measures are feasible
    - How can financial benefits be measured?
    - How can social benefits be measured?
- 4.3 Compile questions of relevance/interest to stakeholders regarding the platform, the data, and data share behaviour to form survey questions.
- 4.4 Design DPARS implementation strategy and measurement tools that will help progress toward business case predictions and address questions of interest.
- 4.5 Determine the best way to roll out implementation so as to test elements of mutual interest, e.g.:

Promote use of the tool via three different means. Randomly assign potential users to receive one of the three means of promotion. The promotional means that attracts the most users, and the highest volume of use, will be the most effective means of scaling up. These results can be combined with cost figures to determine the more efficient use of resources.

Promote use of the tool in three successive waves. Measure risk assessment capabilities of partners before tool usage, after tool usage, and then at successive intervals. Capture tool value to partners over time to see whether usefulness grows (indicating tool adoption and sustainability), or diminishes (indicating lack of adoption).
- 4.6 Put measurement tools in place to collect baseline data for prototype 1.

## **Stage Two:** Preliminary Evaluation Stage

**Timing:** March 2017 – Sept 2017

### **Objectives:**

- 4.7 Assess progress of Essex Data: Platform toward business case predictions.
- 4.8 Decide whether current measures and activities are capable of generating evidence that can speak to predictions;
- 4.9 Perform preliminary analysis of data to determine which types of organisations are more likely to find the tool useful, which are more likely to use it, and which are more likely to change behaviour as a result.
- 4.10 Provide interim progress report with findings and recommendations for revisions, adjustments, etc., prior to project completion.

## **Stage Three:** Project Completion Stage

**Timing:** After the Preliminary Evaluation interim progress report is released

### **Objectives:**

- 4.11 Evaluate data up to completion.
- 4.12 Provide final report with findings and recommendations for future activity.
- 4.13 Speak to the role of DPARS in Essex County Council's evolution. In particular, to address the questions:
- 4.14 How does DPARS fit in to the broader TCA programme?
- 4.15 Can DPARS help fuel the initiative for cultural change in Council projects, shifting from crisis assistance to early intervention?

Essex Data: Platform programme Logic model				
Inputs	Activities	Outputs	Outcomes	Impact
<p>Funding attracted through bids to the Transformation Challenge Award and the HEFCE Catalyst project.</p> <p>Essex Partnership Board sponsorship and oversight.</p> <p>Delivery expertise and input -</p> <ul style="list-style-type: none"> <li>- Project management and communication</li> <li>- Information Governance</li> <li>- Vulnerable People Commissioning</li> <li>- Data intelligence</li> <li>- Technical solutions</li> </ul>	<ol style="list-style-type: none"> <li><b>1. Development of a tool that will enable data sharing across organisations and produce predictive analytics to support commissioners.</b> <ul style="list-style-type: none"> <li>- Procurement of third party data intelligence tool/partner.</li> <li>- Identifying and agreeing appropriate data sets for the prototype to enable the tool to be tested.</li> <li>- Collaborative implementation and testing of a Pseudonymisation tool, a data dashboard and risk model.</li> </ul> </li> <li><b>2. Working with partners to engage them in the programme</b> <ul style="list-style-type: none"> <li>- Agreeing data share protocols with partners.</li> <li>- Communication of the benefits of the tool - develop the market - scale up.</li> </ul> </li> <li><b>3. Building a body of knowledge around prototype 1 – school readiness in Vange</b> <ul style="list-style-type: none"> <li>- Insight for Innovation work - Ethnographic research with families, insight from stakeholders and a report to inform the commissioning plan.</li> <li>- Metanalysis of the published research on variables impacting school readiness.</li> </ul> </li> <li><b>4. Monitoring and Evaluation</b> <ul style="list-style-type: none"> <li>- Development of performance measures to enable the monitoring of progress of the programme.</li> <li>- Development of a financial benefits model to enable the benefits of the commissioning decisions informed by the tool to be calculated.</li> <li>- Production of a body of evidence to support a case for future funding of the third party contract costs.</li> </ul> </li> </ol> <p><i>Activities in scope but yet to be defined in detail</i></p> <ul style="list-style-type: none"> <li>- Widening prototype1 to cover a wider geographical area than Vange.</li> <li>- Developing two further prototypes in the areas of Domestic Abuse and Frailty in Older people.</li> </ul>	<ol style="list-style-type: none"> <li><b>1. A data share platform and risk stratification tool</b> that is <ul style="list-style-type: none"> <li>- Accessible</li> <li>- Flexible</li> <li>- Easy to use</li> <li>- Compliant and secure</li> <li>- Scalable</li> <li>- Used and trusted by partners</li> <li>- Affordable and sustainable</li> <li>- Interoperable with other similar platforms and systems</li> <li>- With data sets that are</li> <li>- Relevant to the risks being predicted</li> <li>- Flexible</li> <li>- Good quality - clean</li> <li>- Robust</li> <li>- Broad</li> </ul> <p>That together produce valid predictions that can be used to inform commissioning.</p> </li> <li><b>2. A standardised agreement</b> across partners involved in prototypes to share data. <b>A communications approach</b> that raises awareness of the programme.</li> <li><b>3. A proof of concept achieved via prototype 1.</b> Risk profiles produced which are used to inform commissioning of early interventions to support children in Vange to be school ready. <b>A metanalysis</b> of research on variables impacting Children's readiness for school.</li> <li><b>4. Regular engagement and reporting</b> on progress based on the logic model. <b>Evaluation reports</b> that demonstrate and evidence progress.</li> </ol>	<p><b>Prototype 1 - Best start in life; primary success measure School Readiness</b></p> <p>Children whose circumstance may have meant they were not ready for school at the age of 5, and therefore were not able to progress as expected through the schooling system, are supported early through interventions to them, their family, their community, so that they are ready for school and a downward spiral is prevented.</p> <ul style="list-style-type: none"> <li>- More children are school ready in prototype area</li> <li>- The early interventions are predicted to bring overall savings to the taxpayer.</li> </ul> <p>Improved culture of working across agencies to share data to enable better life chances.</p> <ul style="list-style-type: none"> <li>- an openness and willingness to share data</li> <li>- an understanding of how to share data</li> <li>- a citizen and outcomes focus</li> </ul> <p>Improved structures and processes to support data share.</p> <ul style="list-style-type: none"> <li>- Shared systems</li> <li>- Shared protocols</li> <li>- Shared funding of tools</li> <li>- Joint commissioning</li> </ul> <p>Improved community resilience in prototype area</p> <ul style="list-style-type: none"> <li>- Less use of statutory services</li> </ul>	<p>A more joined up public sector workforce who use cross system data in a more agile and responsive manner to predict where to intervene to prevent issues becoming more complex and costly to support.</p> <p>Increased capacity to respond to the growing pressures on public services as interventions are made when issues are less complex and are more targeted.</p> <p>More efficient and effective use of public resources across the system and communities who rely less on public services.</p> <p>Improved life chances for vulnerable people.</p>
<p><b>Context and Rationale</b></p> <p>Early intervention prevents issues escalating which is better for the people affected and less expensive for the taxpayer.</p> <p>Bringing together data sets held by different organisations and analysing them to predict risk can provide additional insight into where interventions should be targeting to prevent issues escalating.</p> <p>Separate organisational structures and cultural silos, plus information security and governance regulations, mean that openly sharing data sets between organisations that together support vulnerable people, although now recognised as key, is not yet happening effectively.</p> <p>The project aims to deliver a data sharing and risk modelling tool that will contribute to a culture change in the way partners work together to deliver targeted early interventions that support improved outcomes for vulnerable people and reduce the overall cost of interventions.</p>				