Evaluation Criteria for Apples-to-Apples Matrix

The Public Science Collaborative conducted two surveys, six focus groups, and three workshops on behalf of the Community Action Network (CAN) to evaluate their current data systems’ effectiveness and feature gaps. Across these settings, CAN stakeholders were iteratively asked, “What works well for you in your current data system?” And “How might a future system better meet your needs”? The resulting usability principles, also known as heuristics, were then refined into “apples-to-apples” criteria that became the basis of PSC’s data system evaluation.

To better meet the needs of CAN’s target data users and achieve more effective and impactful results, we recommend future systems address these six human-centered heuristics:

1. **Intuitive Data Entry**: The data system should have interfaces that are easy to use, reducing the chance of errors and improving the overall user experience. Staff shared that options for duplication and formatting alerts are highly valued, as are client portals to support data collection. Vendors remarked that integrating client lists with vendor software is often complicated by inaccurate data, and accuracy would improve with alert features. Clients noted that less confusing, duplicative, and time-consuming entry portals would improve their experience. Meeting the goals of this usability principle would be especially beneficial for staff, clients, and vendors.

2. **Accurate Reporting**: Reports generated by the system should be trustworthy and reliable, with access to all relevant fields and data. State leaders observed that federal funds require comprehensive and accurate data collection, and misinformation may threaten future funding. ICAA leaders noted that better access to accurate cross-agency reporting was critical to supporting their statewide efforts. Agency leaders reflected that poor reporting was costing local groups money and human resources already in short supply. Staff members shared concerns that reports generated with identical filters, minutes apart, were different, and more trust was needed in findings produced by the data system. Staff, agency leaders, ICAA leaders, and State leaders will be benefitted by improving report accuracy in the new system.

3. **Customizable Systems**: The data system should allow for agency-level customization and offer tailored options for specific agencies or groups of agencies, giving decision-makers more control over how their local system is used. Agency leaders confirmed that opportunities to customize directly, without engaging data system owners, were particularly valuable. State leaders shared that system-wide customization based on universal reporting needs was also crucial for a successful system. State and agency leaders are particularly benefitted from this supporting this usability principle.

4. **Strong Governance and Security**: The data system must ensure the security and privacy of client data through measures such as privacy certifications, multi-factor authentication, and role-based access controls. Project and employee management are highly valued for creating secure HR opportunities within the system. There was universal agreement about the need for a strong governance and security system among leaders from ICAA, the State, and local agencies, although all data users will be benefitted from a secure system, including vendors, front-line staff, and clients.

5. **Seamless Integration**: Integration with other systems through APIs or bulk data transfer can improve accuracy and reduce the chance of double entry. Integration was highly valued by agency leaders, State program leaders, and ICAA leaders, who seek to reduce data silos, improve access to data insights that drive change, and provide a statewide perspective across multiple agencies and services.

6. **Adequate Training and Support**: All data system users should have access to role-specific training materials, on-call support, and a formal training process to ensure everyone can effectively use the system. When data system users were asked what type of training they would like to receive, agency leaders told us that training should be asynchronous, ‘canned,’ and easy to understand to meet the needs of a high-turnover workforce. Front-line staff noted that they would like on-call support to help them address pressing issues promptly. Recommendations for videos, webinars and training manuals were suggested by ICAA leadership, reflecting the need for iterative, formal training that ICAA can help distribute. Staff and leadership from agencies and ICAA would benefit most from implementation of this principle.
In the next phase of this project, the Public Science Collaborative will evaluate five high-value data systems identified in consultation with Iowa’s Community Action Association leadership, including CAP60, EmpowOr, eLogic Genesis, T.H.O., and NIFCAP. Each data system will be evaluated on the apples-to-apples evaluation criteria through a multi-step data collection process:

1. The PSC team will review online training materials and participate in live or recorded demonstrations of the data system products.
2. PSC will conduct one-on-one interviews with data system providers to clarify questions that emerged in prior steps and gain new insights into how well the system performs across the six criteria.
3. The assessment results will be reviewed for consistency and gaps, and additional emails, phone calls, and meetings will be set up as needed with data providers to complete the matrix as thoroughly as possible.

**Proposed Data System Evaluation Matrix**

A prototype of the matrix is provided below. The six criteria are described in the far left column. The five data systems are listed across the top row. Each table cell will have an overall rating of Poor, Fair, Good, or Excellent, reflecting the overall score for each data system by each criterion. Additional details will be provided to further explain how the data system meets (or not) the criteria established by the key data users.