



AGILE FUSION CELLS FOR COVID-19 PAYMENT INTEGRITY

Payment Integrity Risks in Pandemic Response

As of April 2020, the U.S. Congress and the Trump Administration have authorized nearly \$3 trillion in new money to counter the human and economic cost of the Coronavirus pandemic. The funds provide support for a wide array of needs ranging from healthcare, to individual benefits programs, to state / local government and tribal responses, to infrastructure- and workforce-related programs.

The combination of the volume of funding, the wide array of uses, and the varying payment mechanisms present significant payment integrity challenges. Conventional wisdom says that 7% of government spending is subject to fraud, waste and abuse, which if applied to the \$3 trillion figure, means potentially more than \$210 billion will be paid out in error or to fraudsters. This would be unacceptable to the American taxpayer.

Government agencies must take strong actions to prevent this fraud, waste and abuse – moving “left of check” – as shown in Figure 1. While the Coronavirus Aid, Relief and Economic Security (CARES) Act establishes the Pandemic Response Accountability Committee (PRAC) to provide enhanced Inspector General community oversight, agencies are nevertheless responsible for the integrity of payments they make. Both agencies and the PRAC can take advantage of a proven model – agile fusion cells – to fulfill their payment integrity roles. Agile fusion cells are a powerful approach for collaborative, agile, and rapid detection and prevention of negative events.

Agile Fusion Cells

Analytic fusion solutions have proven successful in intelligence, law enforcement, financial, and other sectors. These solutions represent collaborative data-driven discovery and analysis and come in a variety of sizes and structures that can be viewed along a continuum. This continuum runs from single-source, lightweight approaches to multi-source, real-time, robust operations centers. Agile fusion cells are closely aligned with the precepts of fast response and analytic prototyping and depend on a sufficiently capable analytic environment to support their work. Over time, an agile fusion cell can be expanded as needed into a long-term, enhanced structure at the other end of the continuum. This may involve not only federal partners but also potentially state and local governments, financial institutions, and other private sector entities – structured as an Information Sharing and Analysis Center.

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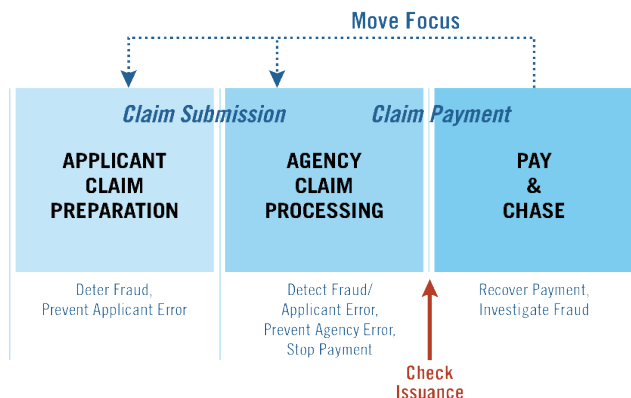


Figure 1. Moving Focus “Left of Check” Issuance

Agile Fusion Cells Defined

As derived from their title, agile fusion cells blend three key elements to drive their effectiveness.

1. **Agile** – All aspects of operations including people, tools, methods, and protocol are focused on rapid and responsive delivery of mission-critical insights and actionable findings. Drawing on attributes of high-performing teams, cell members have high degrees of skill in their areas, autonomy, and experience working in similar environments. This ensures that the cell knows how to surge and adapt as needed to inform its customers’ decisions in a timely manner.
2. **Fusion** – The heart of this undertaking is blending data and information from multiple sources to develop the big picture and identify important trends and entities. By synthesizing data expected to be relevant, sustaining it over time, and bringing in new data as needed, analytic fusion enables insights that would not be possible in individual datasets. It also represents an integrated approach to the cell’s analytic operations, so that a set of tools and methods work together to support discovery of key relationships and patterns.
3. **Cell** – The team is selected for performance and is inherently cross-functional. Subject and domain experts are embedded alongside analysts, data scientists, and IT/developers. This provides the cell a shared understanding of the real-world, dynamic context and emergent needs; enables the cell to modify tools and methods based on team needs; and centers the cell’s analysis on shared data and protocol for working together to accelerate impact.

What Operating a Cell Looks Like

An agile fusion cell is successful when it can predict the unknown and get out in front of the problem. In the case of payment integrity, this looks like preventing payment errors and deterring fraud – moving “left of check” – as shown in Figure 1. To do this, cell members must understand what is known, identify the

relationships in what is known, and connect their knowledge with emerging discoveries and predictive modeling in an evidentiary framework to predict or estimate the unknown. An agile fusion cell includes the capability to:

- **Collect, fuse, and deliver curated data** to analysts, giving them more time to comprehend, analyze, and experiment with information relevant to their objectives. While a core set of common data is managed and updated, new data is added as needs arise, for example, for joint tasks.
- **Discover key relationships and insights** among people, groups, financial transactions and other events, varied identifiers, virtual and geographic locations, times, etc., using statistical and analytic methods.
- **Contextualize and disseminate findings** to customers in a form that meets their expectations for timing, confidence, and actionability.

Figure 2 illustrates how an agile fusion cell works. Agile fusion cells effectively are practicing the art and science of building just-in-time data-driven solutions (operational R&D) to solve difficult, real-world problems. Delivering on this vision requires the cell members to have deep skills/experience and for IT to be an integral part of the cell. This helps cell members understand tools in the context of mission, modify/integrate the tools to meet the mission, and prep data for use by the tools.

Moreover, agile fusion cells require senior management support – leadership’s willingness to provide top cover, buffer the cell from politics and distraction, remove roadblocks, and properly resource the cell is a make or break issue. Culturally, this means leaders must be willing to turn their team loose on the problem and trust in their expertise, professionalism, and capabilities (that’s why they were chosen), while holding them accountable for results.

Attributes of Successful Cells

The following attributes of successful cells can inform the design of agile fusion cells.

- **People and Skills** – Ensure the cell includes inquisitive, intellectually rigorous professionals including: subject matter experts in information, decision, social/behavioral, and financial sciences; analysts and domain experts; experienced operators who lead the effort and address the “So what?” questions to vector the team’s analysis; and senior, skilled developers, engineers, and data scientists. Foster technical training and the ability to manage complexity. Base the specific team composition on the analysis challenge.
- **Analytic Ecosystem and Tools** – Use a toolkit-based approach to align tools to problems and quickly adapt to changes over time. Ensure a continual acquisition of new, leading-edge tools and methods (e.g., artificial intelligence). Follow the approach of use, evaluate, keep or move on. Treat

change management and security as enablers, not obstacles – expect and encourage the ecosystem to change. Consider not just how to use the tools to identify and assert meaning and relationships in the data, but also how to validate, enhance, and communicate those findings.

- **Mission Support and Doctrine** – Tie activities of the cell directly to the mission. Support innovation and bias to action in the cell through leadership providing it autonomy and top cover. Foster applied research and development for just-in-time solutions. Support integrated analyses. Use scientifically defensible, repeatable processes. Design for sustainability. Apply information and decision science techniques to reduce uncertainty.
- **Operations** – Support the urgency to deliver real impact with a shared operational tempo. Enable rapid, responsive acquisition of data, resources, and capabilities – bring new tools and data online quickly. Orchestrate all aspects of supporting functions (e.g., logistics, procurement, facilities, IT, HR, finance, security, privacy, legal) to enable the cell to quickly respond and adapt to emergent needs and exigent circumstances. Ensure analysis and supporting functions operate smoothly together.
- **Organization** – Adopt a flat structure; experienced staff in a cell do not need a large leadership structure or hierarchy that slows development or hinders innovation. Foster self-determination, sharing, and experimentation. Give cell members the autonomy to work together and adapt as they see fit to drive success. Foster a problem-solving approach and a focus on outcomes. As possible, co-locate cell members for high performance.
- **Interoperability** – Recognize that data is more important than tools, and that the cell can never have enough. Collect data from everywhere, tag it, and maintain provenance. Focus on context and content. Foster information access and

openness, with accountability. Ensure the ability exists to handle many types and formats of data with varying quality, completeness, and other caveats. Manage data separately from the tools, and in a way that the tools can easily be fed, favoring collection and pre-processing prior to analytic eyes-on. Avoid proprietary interfaces and data stores/structures. Support open and adaptable methods for connecting systems, flowing data, and reusing artifacts and capabilities in the cell, so that analysts can easily move among tools and data in the cell as needed.

How to Establish an Agile Fusion Cell

The attributes and considerations noted above can inform the definition, buildout, and operation of an agile fusion cell. Key questions to address in this process include:

- What is the core mission — what question(s) must be answered to deliver impact?
- What skills and experiences are required for the cell to deliver on the mission and questions?
- What data is required?
- How can data be made available in a way that addresses constraints on its sharing/use, for example by shaping data sharing agreements to support security and privacy?
- What technical environment is needed?
- What protocol and methods are required?
- Who is best suited to contribute data, personnel, IT, funding or other resources to the mission?
- How can the required resources be sourced quickly and effectively (not one and done; need to change over time)?

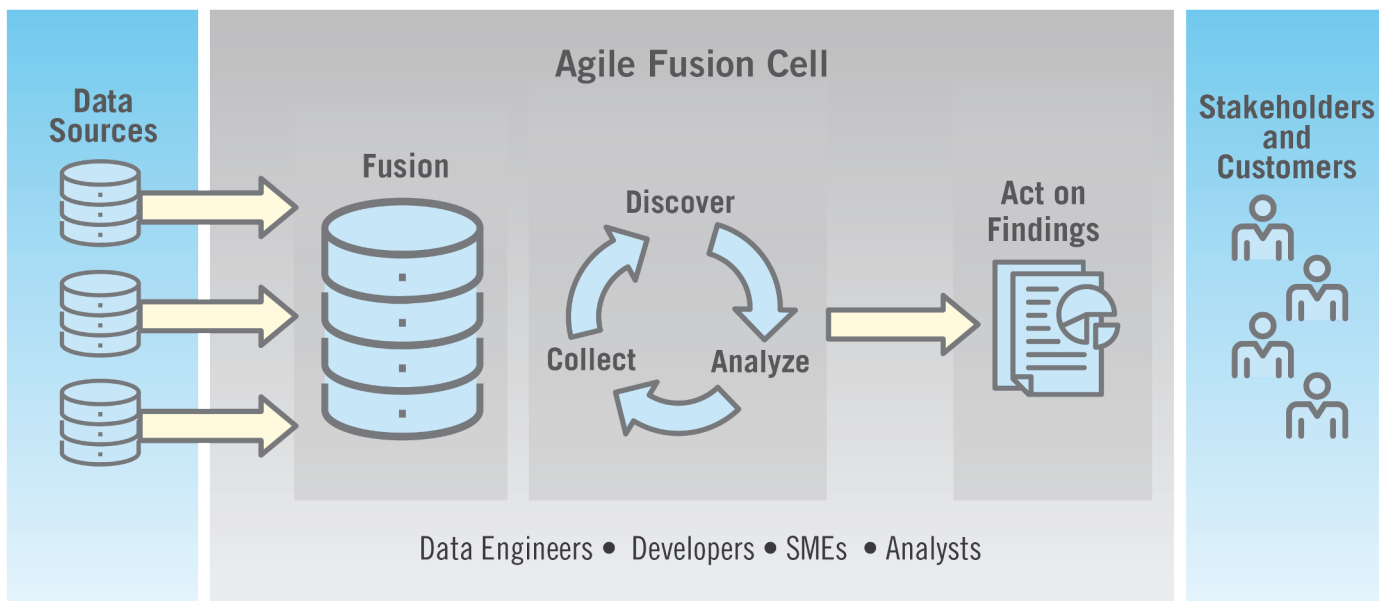


Figure 2. Integrative, Iterative, and Adaptive Delivery of Analytic Insights

Benefits for Agencies and the Taxpayer

Agile fusion cells can help agencies move “left of check” in their efforts to ensure payment integrity by providing multiple advantages over traditional pay & chase methods and organization-specific solutions. Agile fusion cells:

- **Address wicked problems beyond any one entity’s reach.** This is both the primary driver for agile fusion cells and the benefit that can happen at a macro level, across sectors and localities. Stated simply, some problems know no boundaries and cannot be solved or mitigated by any one agency. Whether coordinated criminal activity, systemic abuse and fraud, or other national challenges, the promise and challenge of an agile fusion cell is agencies coming together to solve together what cannot be fully solved separately.
- **Leverage the power of co-investment.** By pooling resources to accomplish a shared mission together, each agency may only need to invest/contribute a small part of what they would have had to if they had funded the whole undertaking themselves. Further, by contributing, they recognize a substantial benefit that exceeds their investment.
- **Deliver powerful insights from their unique vantage point.** Through the sharing and analysis of data that reflects a diversity of experiences and observations, agile fusion cells by definition provide a broader view and often can detect signals in that shared data that would not be obvious in smaller or agency-specific datasets.
- **Enable agencies to take meaningful action.** This bias toward action is a hallmark of well-designed agile fusion cells. The shared capabilities in an agile fusion cell enable identification of common entities/actors, schemes, patterns, etc., that are of value to agencies and benefit the public interest. By focusing operations on generating findings that are by design actionable, real progress happens each day.
- **Enhance agencies’ effectiveness.** Many agile fusion cells provide advance warnings of specific issues, insights into emergent trends, and/or prioritization of concerns and related solutions. By leveraging these insights as a kind of triaging or focusing function, agencies can focus their own operations on areas of highest return.
- **Improve agencies’ internal efficiency.** Agencies can realize efficiencies in their own internal operations based on adopting in whole or part the methods, tools, lessons learned, and insights from the agile fusion cells. Exposure to a diversity of experiences and ideas that can be brought in-house is frequently noted as a benefit of participation.
- **Accelerate time to impact.** While a single agency may take a certain amount of time to realize the benefit from its own operations, agencies can get a boost by inheriting new insights and capabilities from the cell faster than they may have been able to develop them on their own. An agile fusion cell can be stood up rapidly, and the shared data/insights mean that as soon as the cell identifies something from one agency, all agencies are notified, often drastically reducing everyone else’s time to take action and realize positive outcomes.

Agile fusion cells are a proven way to collaborate on data-driven discovery and analysis that can quickly bring to bear data, advanced tools, and subject matter insights on big, difficult problems with improper payments. These cells can help all entities responsible for effectively using and overseeing the trillions of dollars in stimulus funds for healthcare, individual benefits, workforce, and other important purposes to be smarter and faster in responding to the current challenges.

For information about payment integrity expertise and capabilities, contact Gordon Milbourn, gmlbourn@mitre.org.

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