

Fraud Prevention System 2

PREDICTIVE MODELING TO PREVENT FRAUD



The Small Business Jobs Act of 2010 (Public Law 111-240) mandates the use of predictive modeling and other analytic technologies to identify and prevent fraud, waste, and abuse in the Medicare FFS program.

In 2011, the Centers for Medicare & Medicaid Services (“CMS”) developed and implemented the Fraud Prevention System (“FPS”), now FPS2, to implement predictive analytics technologies to identify and prevent the payment of fraudulent claims in the Medicare Fee-for-Service Program.

- The FPS 2 develops models to identify fraud waste and abuse and monitor the models to validate effective alerting.
- The FPS 2 updated models to create effective leads for the investigators.
- The FPS 2 added edits to the system that will reject and deny claims payments.

Since June 30th, 2011, the FPS has applied advanced analytics—and, more recently, machine learning analytics—against over 11 million Medicare FFS pre-paid claims each day on a streaming, nationwide basis. This information is updated daily for end-users.

How it Works

As a robust predictive modeling tool, the FPS has helped CMS move away from “pay and chase” towards a more proactive approach to fraud prevention.

PRE-PAYMENT EDITS

Prepayment edits automatically flag all or part of a claim, or automatically hold payment of all or part of a claim. This occurs when a physician codes a claim incorrectly or a service is deemed to be medically unlikely or invalid from a serviceable standpoint.

When fraud is suspected, pre-payment edits trigger other oversight processes.

POST-PAYMENT MODELS

The FPS performs post-payment analysis on claims, applying predictive models and other algorithms to identify providers and suppliers exhibiting a pattern of behavior indicative of potential fraud.

When fraud is suspected, the FPS models use complex algorithms to trigger potential investigations. This includes generate alerts and prioritizing leads for further review.

The FPS currently runs models to trigger investigations when fraud is suspected. These models also provide information that can be used for future fraud deterrence.

The FPS integrates seamlessly with the Unified Case Management (UCM) system using bi-directional web services. This integration with the UCM supports monitoring of fraud activities.



FPS 2

Who Uses the FPS?

The FPS system is used primarily by CMS and CMS-contracted Unified Program Integrity Contractors (UPICs), Program Integrity Modeling and Analytics Support Contractors (PIMASCs), and Select Medicare Administrative Contractor (MAC) users supporting the MAC Provider Intervention Program (MPIP).

The FPS is used to identify and prioritize new and updated leads for triage and investigation. The FPS system gives UPICs access to key information, such as provider risk scores, cost, and alert metadata, that helps to prioritize investigative activities.

UPICs can also leverage supplemental data from the FPS that includes:

- report cards to compare providers across national and zone-based metrics
- geo-mapping
- provider billing pattern analytics
- link analysis
- associations with external data sources, such as providers already under investigation by law enforcement

FUTURE STATE

- Cutting-edge machine learning technologies will be assessed for use in fraud, waste, and abuse detection
- Increase cost savings in operational information technology infrastructures
- Improve cost recovery from administrative actions
- Improve time-to-market for predictive models
- Enhance existing monitoring models, giving users the ability to leverage more advanced modeling patterns

The FPS 2 develops models to identify fraud waste and abuse and monitor Medicaid data.