VERAFÎN

BENCHMARKING REPORT | Q2 2022

Quarterly Cloud Insights: Wire Fraud

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Executive Summary

Fraudsters are uncompromising, often targeting seniors with cruel elder financial abuse tactics from romance and investment scams. Amid pandemic isolation measures, the rise of digital banking, and other exacerbating factors, seniors are facing an increased risk of falling victim to wire fraud scams — this trend is evident in our latest analysis of Verafin Cloud data, including high-value wire fraud attempts against elderly business owners.

Given our unique position in the industry, Verafin often receives requests to provide benchmarking statistics for wire fraud and related scams, such as Business Email Compromise (BEC). We have gathered insights into key fraud trends by analyzing our consortium-based data set in the Verafin Cloud, representing \$4T in collective assets from 2100 financial institutions. This report describes attempted wire fraud trends and statistics observed from Verafin Cloud data from Q2 2020 to Q4 2021.¹ We analyzed four key segments (business, title company, person, and elderly person), domestic and international wire transactions, and benchmarking metrics, including basis points and quarterly transaction statistics. The analyzed data originated from rich wire transactions via FedWire and SWIFT and included cases of fraud identified in the Verafin Cloud.



CLOUD AND COUNTERPARTY STATISTICS Protecting the Vulnerable with Consortium-Based Data

As financial institutions face significant threats from sophisticated criminals, consortium-based data is crucial to effectively combat Authorized Push Payment (APP) fraud scenarios, including BEC and scams targeting consumers. With our growing number of customer partners, we are realizing enhanced identification of potential mule accounts and improved performance of our payments fraud solutions.



TRENDS OVERVIEW Growing Attacks Against Seniors

Elderly persons saw the most significant volume of attempted wire fraud occurrences in Q4 2021 (54%), and by value, attempts against elderly persons increased significantly from Q4 2020 (21%) to Q4 2021 (36%). For business and title companies combined, attempts by value decreased from Q4 2020 (70%) to Q4 2021 (55%).



BUSINESS WIRE FRAUD Finance and Insurance, Construction Higher Risk

By basis points, attempted wire fraud against businesses declined in value and occurrence. In Q4 2021, the median value for attempted business wire fraud increased from Q2 2020, from \$34.2K to \$36.1K. Finance and Insurance (25%) and Wholesale and Retail Trade (14%) led attempts by occurrence, while Construction (24%) and Professional Services (21%) led value.

¹ Due to continual refinement of our Cloud data, values in this report may differ slightly from those presented in reports for previous quarters, with no significant variation in trends observed.



PERSONAL WIRE FRAUD Elderly Remain Prime Target

By basis points, attempted wire fraud against persons increased in value and occurrence. In Q4 2021, the median value for attempted wire fraud against persons was \$6.4K, up significantly from \$5.8K in Q2 2020. Elderly persons (people aged 55 or older) are preferred victims for wire fraud, accounting for 71% of occurrences and 82% of attempted wire fraud value in Q4 2021. Cloud-based evidence explained away a significant percentage of person wires with a new beneficiary.

DOMESTIC WIRE FRAUD Increases for Massachusetts, Nevada, Washington

By basis points, attempted domestic wire fraud decreased in value and occurrence. In Q4 2021, the median value of a domestic wire fraud attempt was \$12.5K, up from \$7.5K in Q2 2020. Three states outside of the top ten saw major increases by occurrence from Q3 to Q4 2021: Massachusetts, Nevada, and Washington. Nevada also saw a major increase by value from Q3 to Q4 2021. Cloud-based evidence continued to explain away a significant proportion of domestic wires with a new beneficiary.



INTERNATIONAL WIRE FRAUD Trends for Canada, Peru, Vietnam

By basis points, attempted international wire fraud decreased in value and occurrence. In Q4 2021, the median value of an international wire fraud attempt was \$13.6K, up from \$9.8K in Q2 2020. Canada saw a significant increase from Q3 to Q4 2021 by value, while Peru and Vietnam saw significantly increased attempts by occurrence from Q3 to Q4 2021. Given the current geopolitical climate, trends related to Russia may evolve considerably in future analyses. Cloud-based evidence continued to explain away a significant proportion of international wires with a new beneficiary wires with a new beneficiary.

Verafin Cloud Statistics

Wire and ACH volumes in the Verafin Cloud saw steady increases in both count and value from Q2 2020 to Q4 2021, representing continued growth of institutions leveraging Verafin's payments fraud solutions. This ongoing growth in our data strengthens our analytics and affords greater insight into emerging trends. The information collected for this report also provided the fraud cases used in this report.



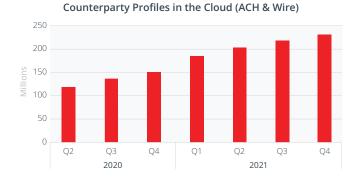
Counterparty Statistics

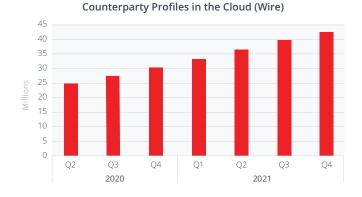
Counterparties are critical to understanding the risk associated with payments fraud, and the ability to identify safe counterparties as well as potential mule accounts is key to an effective fraud prevention program.

At Verafin, our consortium-based data set allows for a more complete picture of customer transactions, interactions, and relationships, including counterparties that are not Verafin customers. Using information extracted from rich data across the Cloud, Verafin resolves details about entities to form counterparty profiles, helping investigators expedite reviews and better assess the risk associated with activity. As the size of our Cloud data set increases, so too does our ability to reduce false positives for more effective and efficient investigations.

Wire-only counterparty data is a strong evidence for wire fraud detection due to the low-volume nature of wire as a payments channel. At Verafin, we harness this evidence and supplement our approach with ACH counterparty data, especially when identifying potential demographics for accounts related to a financial institution that is not a Verafin customer. In this scenario, the high-volume nature of ACH as a payments channel allows for more accounts to be profiled.

The amount of counterparty profiles within the Verafin Cloud grew significantly during the analysis period. The number of ACH and wire counterparty profiles grew from 118.4 million in Q2 2020 to 230.4 million in Q4 2021. For wire alone, the number of counterparties grew from 24.8 million to 42.6 million in the same seven quarters. As the number of counterparties in the Cloud rises, Verafin's analytics can leverage this data for increasingly powerful payee risk analysis to determine the risk associated with a wire sent to a particular receiving account. The number of ACH and wire counterparty profiles grew from **118.4M in Q2 2020 to 230.4M** in Q4 2021.

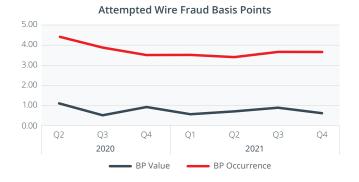




Wire Fraud Insights — Overview

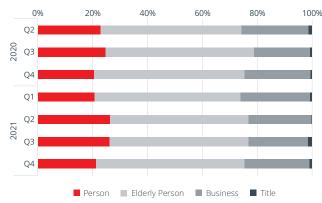
Our analysis provided an overview of wire fraud trends focused on four segments — business (excluding title companies), title companies, persons, and elderly persons (individuals aged 55 years or older).

By basis points, attempted wire fraud declined in value and occurrence from Q2 2020 to Q4 2021. From the perspective of quarterly transaction statistics, the mean value of attempted wire fraud declined from Q2 2020 to Q4 2021, but the median increased steadily in the same period.



When analyzing occurrences by segment, the percentages for Q4 2021 closely mirrored the values for Q4 2020. Elderly persons saw the most significant volume of attempted wire fraud occurrences in Q4 2021 (54%), although this was down slightly from Q4 2020 (55%). While persons accounted for 9% of attempted wire fraud by value in Q4 2020 and Q4 2021, the value attributable to elderly persons increased significantly from 21% to 36% in this same period, while business and title companies combined decreased from 70% to 55%.

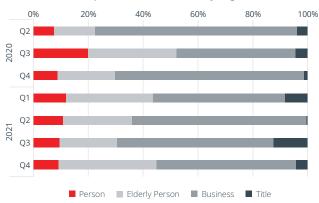
Attempted Wire Fraud Occurrences by Segment



Attempted Wire Fraud Quarterly Transaction Statistics



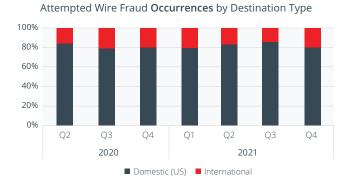
Elderly persons saw the most significant volume of attempted wire fraud occurrences in Q4 2021 (54%).





Wire Fraud Insights ... continued

Domestic attempted wire fraud continues to be more prevalent by occurrence than international attempted wire fraud. By value, domestic attempts were also more prevalent than international, with domestic increasing significantly from Q2 2020 (68%) to Q4 2021 (79%).

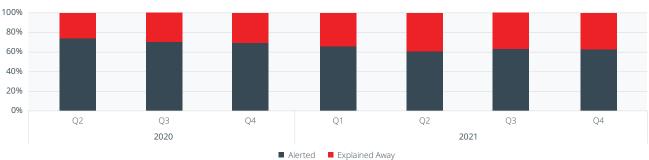


When leveraging a consortium-based approach to wire fraud detection, the amount of data available to analytics is crucial. As the size of the Verafin Cloud data set grows, more alerts can be explained away by cloud-based evidence. From Q2 2020 to Q4 2021, cloud-based evidence explained away a significant percentage of wires with a new beneficiary. In this scenario, cross-institutional analytics were better able to determine if beneficiaries that were new to the payer could be trusted based on the consortium-based data in the Verafin Cloud.

Attempted Wire Fraud Value by Destination Type



By value, domestic attempts were also more prevalent than international, with **domestic** *increasing significantly from Q2 2020 (68%)* to Q4 2021 (79%).

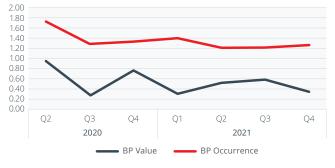


Wires with New Beneficiary Explained Away Due to Cloud Evidence

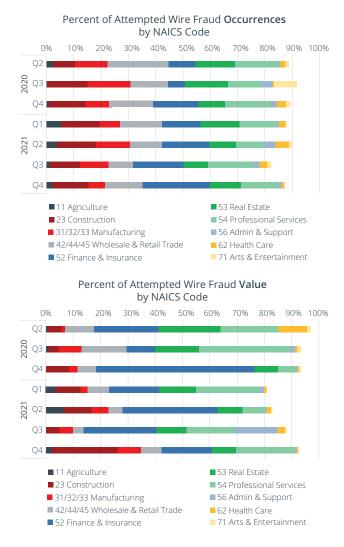
Business Wire Fraud Insights

From Q2 2020 to Q4 2021, attempted wire fraud against businesses decreased in terms of basis points by value and occurrence.

The mean value for attempted business wire fraud significantly and consistently exceeded the median value for all quarters. While the mean declined over the analysis period, the median increased. Analysis by NAICS code showed that ten industry segments accounted for the majority of attempted wire



Attempted Business Wire Fraud Basis Points



Points Attempted Business Wire Fraud Quarterly Transaction Statistics



fraud, with Finance and Insurance (25%) and Wholesale and

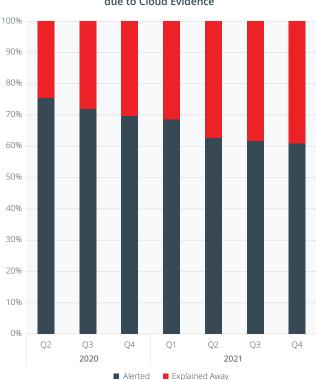
Retail Trade (14%) leading by occurrence, and Construction

(24%) and Professional Services (21%) by value. Cloud-based

evidence continued to explain away a significant proportion

of business wires with a new beneficiary.

Ten industry segments accounted for the majority of attempted wire fraud, with Finance and Insurance (25%) and Wholesale and Retail Trade (14%) leading by occurrence, and Construction (24%) and Professional Services (21%) by value.

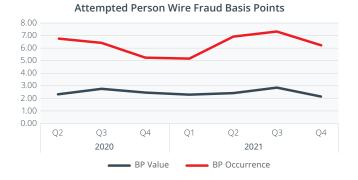


Business Wires with New Beneficiary Explained Away due to Cloud Evidence

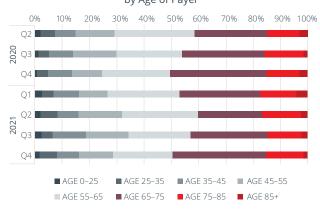
Personal Wire Fraud Insights

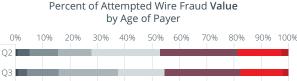
By basis points, attempted wire fraud against persons increased from Q2 2020 to Q4 2021, both in terms of occurrence and value.

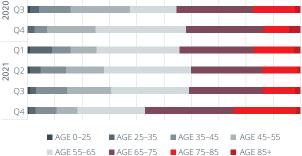
The mean and median value of attempted wire fraud against persons increased over the analysis period, although the median was consistently and significantly lower than the mean for all quarters. Analysis of attempted wire fraud by age of payer demonstrated that elderly persons (people aged 55 or older) are preferred victims, accounting for 71% of occurrences and 82%



Percent of Attempted Wire Fraud **Occurrences** by Age of Payer





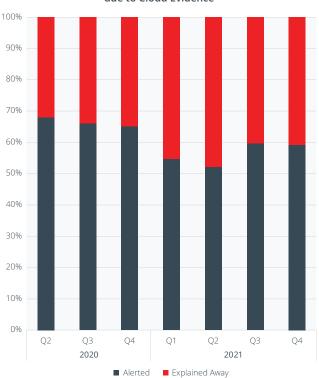


of attempted wire fraud value in Q4 2021. More specifically, the 75 to 85-year age segment saw a surge in wire fraud attempts by value from Q3 to Q4 2021, while the 65 to 75 year age segment saw an increase by occurrence over the same period. Cloud-based evidence continued to explain away a significant percentage of person wires with a new beneficiary.



Attempted Person Wire Fraud Quarterly Transaction Statistics

Elderly persons are preferred victims, accounting *for 71% of occurrences* and 82% of attempted wire fraud value in Q4 2021.

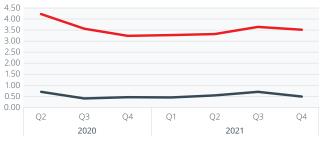


Person Wires with New Beneficiary Explained Away due to Cloud Evidence

Domestic Wire Fraud Insights

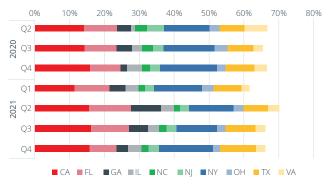
For this report, domestic wires are wire payments with a destination within the U.S. By basis points, attempted domestic wire fraud decreased in value and occurrence from Q2 2020 to Q4 2021.

In terms of quarterly transaction statistics, the mean and median value of attempted domestic wire fraud increased in the analysis period, with median values being consistently and considerably lower than the mean values for all quarters. In Q4 2021, the top destination states for attempted wire fraud within the U.S. were California, Florida, Georgia, Illinois, North Carolina, New Jersey, New York, Ohio, Texas, and Virginia. However, three states outside this top ten saw major increases

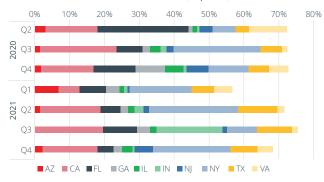


Attempted Domestic Wire Fraud Basis Points

Percent of Attempted Domestic Wire Fraud **Occurrences** by Destination State (Top Ten)



Percent of Attempted Domestic Wire Fraud Value by Destination State (Top Ten)

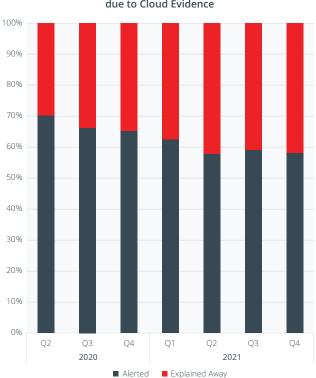


by occurrence from Q3 to Q4 2021: Massachusetts, Nevada, and Washington. For attempted wire fraud by value, top states for Q4 2021 were Arizona, California, Florida, Georgia, Illinois, Indiana, New Jersey, New York, Texas, and Virginia. Nevada also saw a major increase by value from Q3 to Q4 2021. Cloud-based evidence continued to explain away a significant proportion of domestic wires with a new beneficiary.

Attempted Domestic Wire Fraud Quarterly Transaction Statistics

60,000 50,000 40,000 30.000 20.000 10.000 0 Q2 Q3 Q4 Q3 04 2020 2021 Mean Value Median Value

Three states outside this top ten *saw major increases* by occurrence from Q3 to Q4 2021: *Massachusetts, Nevada,* and *Washington*.



Domestic Wires with New Beneficiary Explained Away due to Cloud Evidence

International Wire Fraud Insights

For this report, international wires are wire payments with a destination outside the U.S. By basis points, attempted international wire fraud decreased in value and occurrence from Q2 2020 to Q4 2021.

Considering quarterly transaction statistics, the mean value of international wire fraud attempts decreased over the analysis period — however, the median value increased over the same time frame. Mean values were consistently higher than the median values for all quarters. Across the analysis period, the top ten destination countries for fraudulent wires, by occurrence, were: 1. China 4. Hong Kong 7. Russia 10. Turkey

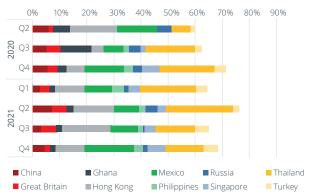
1. China	4. Hong Kong	7. Russia	10. Turk
2. Great Britain	5. Mexico	8. Singapore	
2 Chana	6 Dhilippipos	0 Thailand	

3. Ghana 6. Philippines 9. Thailand

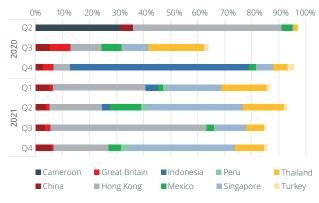


Attempted International Wire Fraud Basis Points

Percent of Attempted International Wire Fraud **Occurrences** by Destination Country



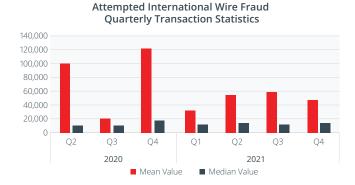




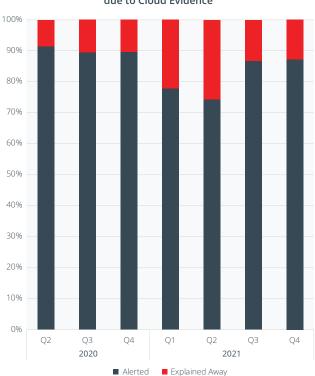
By value, the top ten destination countries were:

1. HUNG KUNG	4. Mallallu	7. China	TU. Migeria
2. Indonesia	5. Cameroon	8. Great Britain	
3. Singapore	6. Mexico	9. Turkey	

Cloud-based evidence explained away an increasing percentage of international wires with a new beneficiary.



Canada saw a significant increase in attempts from Q3 to Q4 2021 by value.



International Wires with New Beneficiary Explained Away due to Cloud Evidence

Case Study Ensuring a Sunny Tomorrow

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Verafin quickly alerted Iluminar Financial to the attempted fraud – our Wire Fraud analytics determined that the wire payee was new to the Bank, the payer, and the Verafin Cloud, and that the wire value was unusual.

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Verafin Prevents a Major Elder Financial Exploitation Attempt

Criminals are eager to victimize seniors, often causing significant emotional and financial distress to those targeted. Chief among their tactics is BEC— a high-value scam involving social engineering, and often, wire fraud. The following anonymized case study highlights a BEC scenario observed in the Cloud, and how Verafin's robust Wire Fraud solution efficiently and effectively prevented loss.

Mrs. O'Rourke, an 80-year-old woman, was a successful and long-time business owner in the Northeastern U.S. Due to her successful business, she was ready to purchase a winter home in Florida, to avoid the cold Northeastern winters. Mrs. O'Rourke enlisted the help of Eridani Law, located in Florida, to assist with the sale and *was not surprised when she received instructions from the firm for a \$2M wire transfer.*

Mrs. O'Rourke immediately directed her administrator to have lluminar Financial wire the funds. Given the administrator was not the account holder, lluminar Financial conducted a callback, and Mrs. O'Rourke instructed them to proceed with the wire. The payment was input into the institution's wire system.

Unknown to Mrs. O'Rourke, Eridani Law had been the victim of a BEC attack. The email, which appeared legitimate, was a scam that could cost Mrs. O'Rourke her sunny future. When Mrs. O'Rourke contacted Eridani Law to inform them that she had sent the funds as instructed, she was notified that no instructions had been sent — and she was likely a victim of fraud.

Verafin quickly alerted Iluminar Financial to the attempted fraud – our Wire Fraud analytics determined that the wire payee was new to the Bank, the payer, and the Verafin Cloud, and that the wire value was unusual. Together, this evidence indicated sufficient risk for Iluminar Financial to place the wire on hold and investigate before the funds left the institution. Iluminar Financial determined that the wire transfer was fraudulent, and returned the funds to Mrs. O'Rourke, *preventing a potentially devastating \$2M million loss*.

By analyzing customer behavior, along with demographic, historical and third-party data, Verafin provides high-quality alerts to improve wire fraud detection. With targeted agents intelligently segmented by sender type, payee risk analysis in the Verafin Cloud and the ability to stop fraudulent wires in real time, Verafin can help protect your customers from loss — including vulnerable seniors.

Effectively Prevent Loss with Robust Wire Fraud Detection

The dollar value and international nature of many wire transfers make them inherently risky. With criminal schemes such as BEC becoming a growing problem, financial institutions need enhanced monitoring to prevent loss.

Verafin's efficient and effective real-time Wire Fraud solution applies industry-leading, cloud-based analysis to a wide range of risk factors indicative of fraudulent wire activity to generate high-quality alerts that help you take quick and decisive action.

Intelligently Segmented Agents.

A wire that is considered unusual for an individual may not be risky for a business. Verafin's wire fraud agents are segmented by payer — person, elderly person, business and title company — allowing for more targeted analysis based on the specific fraud risks and scams for that group. With segmented wire agents, investigators have greater control over the type and risk value of the alerts they receive which can be individually configured according to your institution's clientele and risk tolerance.

Cross-Institutional Wire Receiver Analysis.

Verafin utilizes cross-institutional data in the Verafin Cloud to analyze if the receiving account of an outgoing wire transfer has a trusted history of activity. This unique evidence helps boost your confidence, minimize risk, and greatly reduce false positive alerts.

This process leverages:

- Over 140 million wires, with 4 million added each month
- 40 million unique payee accounts, with 950,000 new accounts added each month
- 40% of the payee accounts are from the top 10 largest financial institutions in the United States

Real-Time Inline Analysis.

Analyzing a potentially fraudulent wire transfer once it is gone is often too late. Verafin integrates directly with the industry's prominent wire transfer systems to analyze wires in real time. By alerting you to potentially suspicious wires inline, Verafin gives you the option to stop the transfer directly from the application before it is released to the Federal Reserve.

Visual Wire Details.

Verafin provides investigators with all details pertaining to the wire transfer in one location. Quickly interpret the full range of wire transfer information with historical transfer graphs, interactive flow of funds diagrams and visual transaction overviews that include payer, value, payee, and receiving institution data.

Uncover Third-Party Scams.

You are alerted when it appears your customer is being victimized by a known criminal deposit scam — such as BEC — before the funds are transferred.





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About Verafin

Verafin is the industry leader in enterprise Financial Crime Management solutions, providing a cloud-based, secure software platform for Fraud Detection and Management, BSA/AML Compliance and Management, High-Risk Customer Management and Information Sharing. 3500 banks and credit unions use Verafin to effectively fight financial crime and comply with regulations. Leveraging its unique big data intelligence, visual storytelling and collaborative investigation capabilities, Verafin significantly reduces false positive alerts, delivers context-rich insights and streamlines the daunting BSA/AML compliance processes that financial institutions face today.

Verafin is the exclusive provider for Texas Bankers Association, Western Bankers Association, and CUNA Strategic Services, with industry endorsements in 48 U.S. states.

Learn more

For more information on this topic, or how Verafin can help your institution stay a step ahead of financial crime, call **866.781.8433**.

To access Verafin's archive of webinars, white papers, success stories and other materials focusing on fraud detection and BSA/AML compliance topics relevant to financial institutions across the country, check out our online Resource Center at **www.verafin.com**.