

Assessing the Persistence of Provider Directory Inaccuracies in Pennsylvania ACA Marketplace Plans Using Repeated Secret Shopper Surveys

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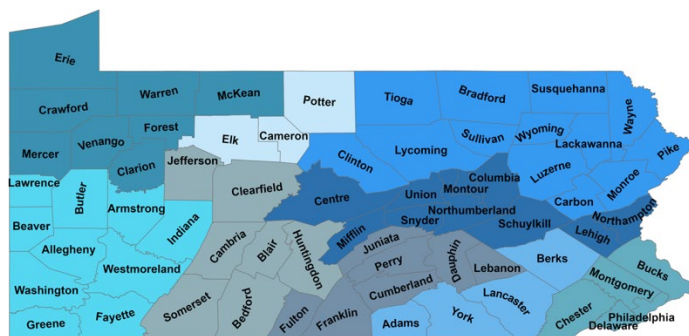
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Executive Summary

Provider directory inaccuracies have important implications for care navigation and access, as well as ongoing regulatory efforts. A growing literature has identified substantial inaccuracies in consumer-facing provider directories, but it is unclear how long these inaccuracies persist particularly given new regulatory requirements included in the *No Surprises Act of 2021*, which went into effect in 2022.

To better understand whether and how long provider directory inaccuracies persist in the ACA Marketplace in Pennsylvania, two initial secret shopper surveys were conducted from June 13 to November 28, 2022, and from March 30 to August 31, 2023. The first survey focused on seven specialties (cardiology, dermatology, endocrinology, gastroenterology, neurology, obstetrics-gynecology, primary care) and assessed five distinct carriers (Ambetter, Capital BlueCross, Highmark BlueCross BlueShield, Independence Blue Cross, Oscar). The second survey included variety of specialties for adults (cardiology, dermatology, endocrinology, gastroenterology, neurology, obstetrics-gynecology, primary care, psychiatry, psychology) and children (general pediatrics and pediatric mental health services from psychiatrists and psychologists) and surveyed eight carriers (Ambetter, Capital BlueCross, Cigna, Geisinger, Highmark BlueCross BlueShield, Independence Blue Cross, Oscar, UPMC). A second wave of secret shopper surveys was conducted for providers identified as exhibiting at least one inaccuracy from December 11, 2023, to January 8, 2024. In this second wave, 1,802 providers (out of 2,134) were re-surveyed from the first survey and 5,170 providers (out of 5,453) from the second survey.

Across both surveys, a large number of provider directory inaccuracies persisted well beyond the 90-day expectation mandated by federal regulations, raising substantial concerns about compliance. Of the 1,802 inaccurate provider listings identified in the first survey, 451 providers (25.0%) had been removed from carrier directories, 240 providers (13.3%) were listed without any inaccuracies, and 726 providers (40.3%) continued to have at least one piece of inaccurate directory information. Callers were not able to reach and verify information for the remaining 385 providers (21.4%). Inaccurate contact information was the most prevalent listing error (N=558, 31.0% of searched providers), followed by inaccuracies related to medical specialty (N=201, 11.2%). Inaccuracies related to network status were less common, occurring for 1.9% of providers (N=34). Among providers with persistent inaccuracies the mean number days between the two survey contacts was 539.8 days (median 544 days).

Of the 5,170 providers provider listings identified in Survey 2, at the time of the re-survey 983 providers (19.0%) had been removed from the provider directory, 600 providers (11.6%) were listed without any inaccuracies, and 2,316 (44.8%) providers were listed with at least one inaccuracy at the time of the re-survey. Callers were unable to reach 24.6% (N=1,271) of providers. Inaccurate contact information was again the most prevalent listing error (N=1,860, 44.8% of searched providers), followed by inaccuracies related to medical specialty (N=472, 9.1%). Inaccuracies related to network status were less common, occurring for 3.7% of providers (N=189). Among those providers

who continued to be listed inaccurately, the mean number of days between survey contacts was 190 days (median 189).

Across both surveys, substantial differences by carrier were identified. Differences based on specialties were present to a lesser degree. However, there generally were no differences based on rurality, while the Pittsburgh and Philadelphia ACA rating areas performed marginally better than the Commonwealth's other regions. Overall, the findings suggest persistent barriers to maintaining and updating provider directories, with implications for how well these tools can help consumers select health plans and access care. These findings also indicate that carriers may take different approaches to network adequacy verification, with variation in staffing, resources, administrative capacity, and institutional knowledge that could affect the frequency and accuracy of these efforts. The presence of inaccuracies over long periods of time may impose substantial barriers for patient access and may render existing assessments of network adequacy ineffective.

Introduction

The vast majority of Americans, including consumers in the Affordable Care Act (ACA) Marketplaces, receive their insurance coverage through managed care arrangements.¹ Consumers are highly incentivized to seek care solely from within their provider network.¹ The most obvious way for consumers to learn about their network is via provider directories.² Insurance carriers publish these consumer-facing provider directories both online and in print. Provider Directories typically contain important information such as contact information or provider specialty.³ This information is then used by consumers to make choices about their health plan selections at the time of plan purchase as well as identifying suitable providers when seeking care.

A growing literature has identified several problems with provider directories.^{2,4-8} In particular, analyses have identified substantial errors in provider directories ranging from incorrect contact information to inaccurate in-network designations. These errors are ubiquitous and have been found across specialties and markets.⁹⁻²⁰ Errors in provider directories are more than mere nuisances and may contribute to delayed or forgone care²¹, exacerbate health inequities,^{15,21,22} and compromise the effectiveness of existing network adequacy regulations.^{2,5,23,24}

State and federal regulators have increasingly become aware of inaccuracies in provider directories as well as the detrimental effects on consumers. In response, they have imposed requirements upon carriers to increase accuracy, although these vary widely in their scope and content.²⁵⁻²⁸ Despite the growing attention, high rates of inaccuracies persist nationwide, even in states with the most stringent regulatory standards, like California.^{13,14,29,30} At the federal level, the *No Surprises Act of 2021*, which went into effect in 2022, requires carriers to update and verify provider directories every 90 days at minimum, and to develop a protocol for removing providers that cannot be verified.²⁸ While adequate enforcement has been identified as a substantial challenge, the effect of state and federal regulations on improving provider directory inaccuracies remains underexplored.^{24,28} As a result, questions have emerged about the extent to which provider directory inaccuracies persist despite these policies. Specifically, it is unclear to what degree carriers are

complying with these requirements and how long inaccuracies continue to persist in consumer-facing provider directories.

To better understand whether and how long provider directory inaccuracies persist in the ACA Marketplace in Pennsylvania, two initial secret shopper surveys were conducted from June 13, 2022 to November 28, 2022 (Survey 1), and from March 30 to August 31, 2023 (Survey 2). The Survey 1 focused on seven specialties (cardiology, dermatology, endocrinology, gastroenterology, neurology, obstetrics-gynecology, primary care) and assessed five carriers (Ambetter, Capital BlueCross, Highmark BlueCross BlueShield, Independence Blue Cross, Oscar). Survey 2 included a variety of specialties for adults (cardiology, dermatology, endocrinology, gastroenterology, neurology, obstetrics-gynecology, primary care, psychiatry, psychology) and children (general pediatrics and pediatric mental health services from psychiatrists and psychologists) and surveyed eight carriers (Ambetter, Capital BlueCross, Cigna, Geisinger, Highmark BlueCross BlueShield, Independence Blue Cross, Oscar, UPMC). Survey 1 identified a total of 2,134 providers with at least one inaccuracy while Survey 2 identified 5,453 such providers. Subsequently, a second wave of secret shopper surveys was conducted from December 11, 2023, to January 8, 2024, for providers identified as exhibiting at least one inaccuracy in Survey 1 and Survey 2. In this second wave, 1,802 providers (out of 2,134) from Survey 1 and 5,170 providers (out of 5,453) from Survey 2 were surveyed a second time to assess if inaccurate provider listings had been removed or updated.

Background on the ACA Market in Pennsylvania

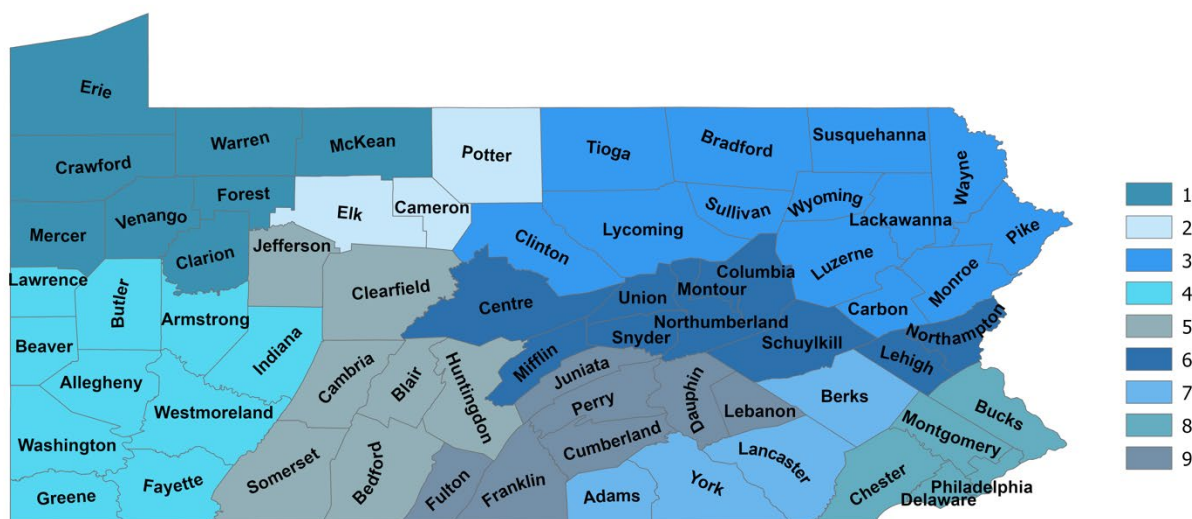


Figure 1: Affordable Care Act Rating Areas in Pennsylvania

Pennsylvania’s 67 counties are divided into nine rating areas (Figure 1). Across the nine rating areas, insurers are selling more than 400 insurance plans, with some of the plans being sold across multiple rating areas. In the individual market, Pennsylvanians were offered insurance plans by seven different carriers for Plan Year 2022 (Table 1, Ambetter, Capital BlueCross, Geisinger,

Highmark BlueCross BlueShield, Independence Blue Cross, Oscar, UPMC) and eight different carriers for Plan Year 2023 (Table 2, Ambetter, Capital BlueCross, Cigna, Geisinger, Highmark BlueCross BlueShield, Independence Blue Cross, Oscar, UPMC). However, with the exception of Highmark, UPMC, and partially Geisinger, insurers tended to focus on specific regions of the state. Two carriers, IBC and Cigna only sold products in one rating area.

Table 1: Carrier by Rating Area, Plan Year 2022

Rating Area	Offers Plans in Region									Total
	1	2	3	4	5	6	7	8	9	
Ambetter			Yes			Yes		Yes		3
Capital BlueCross (CBC)						Yes	Yes		Yes	3
Geisinger		Yes	Yes		Yes	Yes	Yes		Yes	6
Highmark BlueCross BlueShield	Yes		Yes	Yes	Yes	Yes	Yes		Yes	7
Independence Blue Cross (IBC)								Yes		1
Oscar			Yes			Yes		Yes		3
UPMC	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	8
Total Number of Carriers	2	2	5	2	3	6	4	3	4	31

Table 2: Carrier by Rating Area, Plan Year 2023

Rating Area	Offers Plans in Region									Total
	1	2	3	4	5	6	7	8	9	
Ambetter			Yes			Yes	Yes	Yes		4
Capital BlueCross (CBC)						Yes	Yes		Yes	3
Cigna								Yes		1
Geisinger		Yes	Yes		Yes	Yes	Yes		Yes	6
Highmark BlueCross BlueShield	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	8
Independence Blue Cross (IBC)								Yes		1
Oscar			Yes			Yes	Yes	Yes		4
UPMC	Yes	Yes	Yes	Yes	Yes	Yes	Yes		Yes	8
Total Number of Carriers	2	3	5	2	3	6	6	4	4	35

Data and Data Collection

Two initial secret shopper surveys to establish inaccuracies in provider directories were conducted. The first of these surveys was conducted from June 13 to November 28, 2022 (Survey 1). Survey 1 included five of the seven carriers serving the Pennsylvania ACA Marketplace in 2022. Callers surveyed providers in seven specialties (cardiology, dermatology, endocrinology, gastroenterology, neurology, obstetrics-gynecology, primary care). A second more extensive secret shopper survey was fielded from March 30 to August 31, 2023 (Survey 2). Survey 2 included a variety of specialties for adults (cardiology, dermatology, endocrinology, gastroenterology, neurology, obstetrics-gynecology, primary care, psychiatry, psychology) and children (general pediatrics and pediatric mental health services from psychiatrists and psychologists).

Both surveys followed an analogous pattern to ensure the representativeness of the results. Specifically, callers searched providers in proximity to a “home address” assigned to them. These home addresses were randomly chosen from the entire state but distributed proportionally to enrollment in each ACA pricing region. After being assigned a home address as well as other pertinent information like medical specialty, insurance plan, and medical condition, callers searched for a provider of the assigned specialty based on their home address. Callers then contacted providers at the number listed in the online provider directory and asked for the next available appointment. During the calls, callers sought to verify the accuracy of the providers’ contact information, network status, and specialty. Because the callers presented as consumers, phone calls were terminated once any inaccuracy was identified. No actual appointments were scheduled.

Survey 1 identified a total of 2,134 providers with at least one inaccuracy while the Survey 2 identified 5,453 such providers. Inaccuracies fell into the following commonly utilized categories:

- (1) contact information issues (e.g., provider not working at the number listed, phone line being disconnected);
- (2) network status issues (i.e. being listed in-network when they were in fact out-of-network), and
- (3) medical specialty issues.

Based on the previously identified inaccurate provider directory listings from Survey 1 and Survey 2, a second wave of secret shopper surveys was conducted from December 11, 2023, to January 8, 2024. Callers were able to complete this process for 1,802 randomly chosen providers from the list of 2,134 inaccurate providers from Survey 1. Callers were also able to re-survey 5,170 randomly chosen providers from the list of 5,453 inaccurate providers from Survey 2. The process for the repeated secret shopper surveys generally mirrored the initial process. Callers were randomly assigned a provider from the original list of inaccurately listed providers. They then searched the carriers’ online directories for the assigned provider. If the providers were still listed, the caller attempted to contact the provider again (Survey 1: 1,351 providers; Survey 2: 4,187 providers). If the provider was removed from the online directory (Survey 1: 451 providers ; Survey 2: 983 providers), callers moved on to the next randomly assigned provider. For the providers callers were able to contact (Survey 1: 966 providers; Survey 2: 2,941 providers) a second time, callers again tried to verify contact information, specialty, and network status. Again, no actual appointments were scheduled.

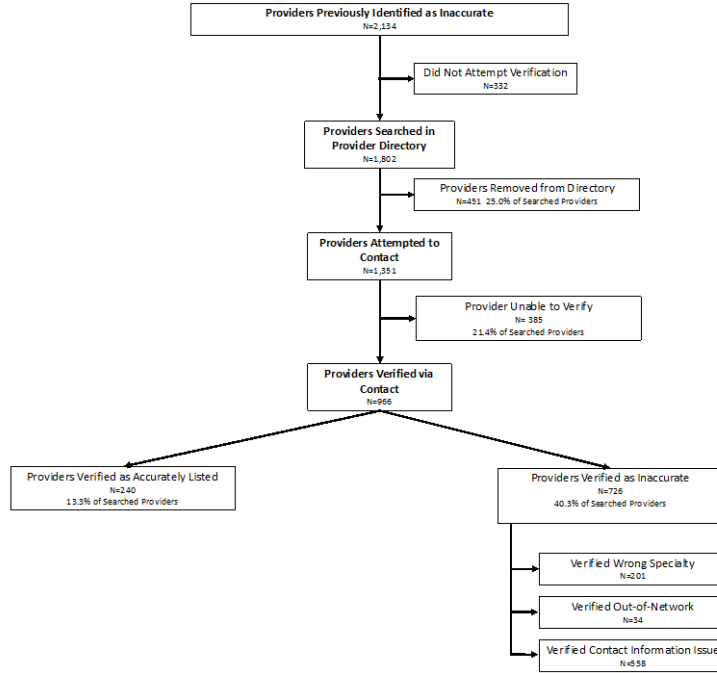


Figure 2: Data Collection Process and Results Overview, Re-survey of Survey 1

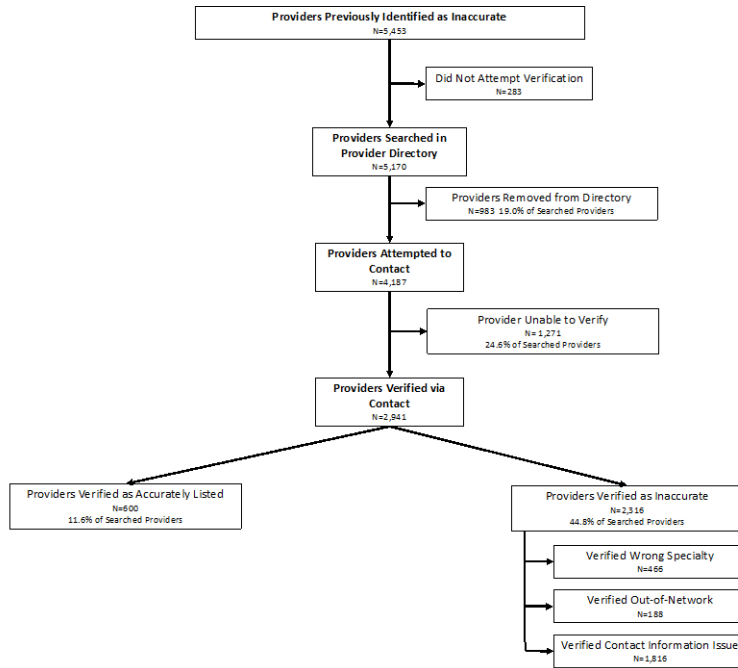


Figure 3: Data Collection Process and Results Overview, Re-survey of Survey 2

Results

Findings for Re-Survey for Inaccurate Providers Identified in Survey 1

Of the 1,802 inaccurate provider listings identified in Survey 1, at the time of the re-survey 451 providers (25.0%) had been removed from carrier directories, 240 providers (13.3%) were listed without any inaccuracies, and 726 providers (40.3%) continued to have at least one piece of inaccurate directory information (Figure 4). Callers were not able to reach and verify information for the remaining 385 providers (21.4%). Inaccurate contact information was the most prevalent listing error (N=558, 31.0% of searched providers), followed by inaccuracies related to medical specialty (N=201, 11.2%). Inaccuracies related to network status were less common, occurring for 1.9% of providers (N=34). Among providers with persistent inaccuracies the mean number of days between the two survey contacts was 540 days (median 544 days).

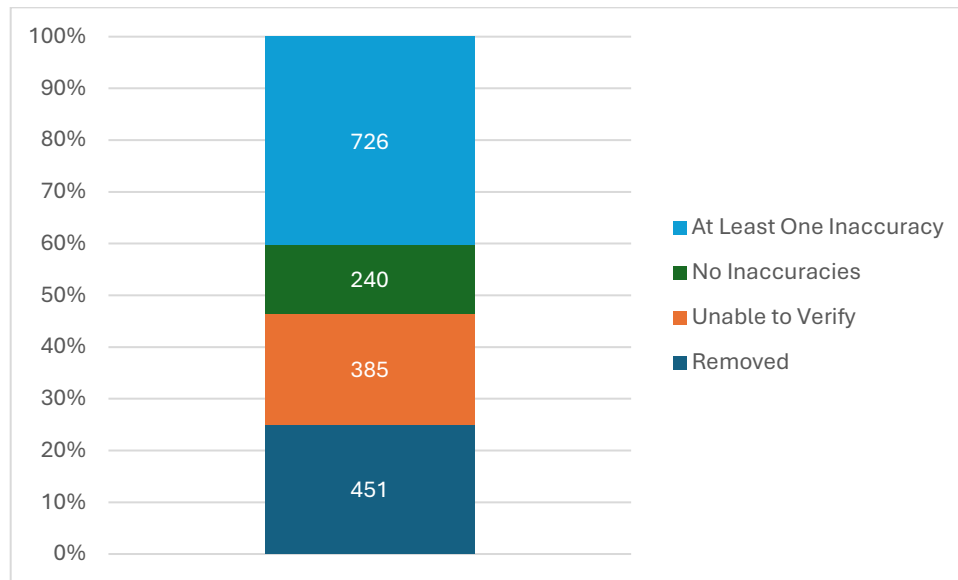


Figure 4: Count and Percentage of Providers Removed or Verified as Accurate or Inaccurate, Re-survey of Survey 1

Differences Across Carriers¹

At the carrier-level (Figure 5, Table 3), callers identified substantial differences in the removal rate of inaccurate provider listings, ranging from a low of 14.6% (N=35, IBC) to a high of 51.3% (N=157, Ambetter, $p < 0.001$ for difference). Inaccuracy rates ranged from 23.3% (N=71, Ambetter) to 52.4% (N=130, Oscar, $p < 0.001$) of all searched providers. Inaccurate contact information ranged from 18.3% (N=56, Ambetter) to 42.7% (N=106, Oscar, $p < 0.001$) of all searched providers, while inaccuracies related to medical specialty ranged from 5.2% (N=16, Ambetter) to 14.2% (N=46, CBC,

¹ Differences were assessed using tests of proportions and t tests as well as ordinary least squares (OLS). Both methods indicated very similar results. Statistical significance displayed throughout the report from tests of proportions and t tests.

p<0.001). Inaccuracies related to network status ranged from 1.2% (N=4, CBC) to 3.2% (N=8, Oscar, p<0.099).

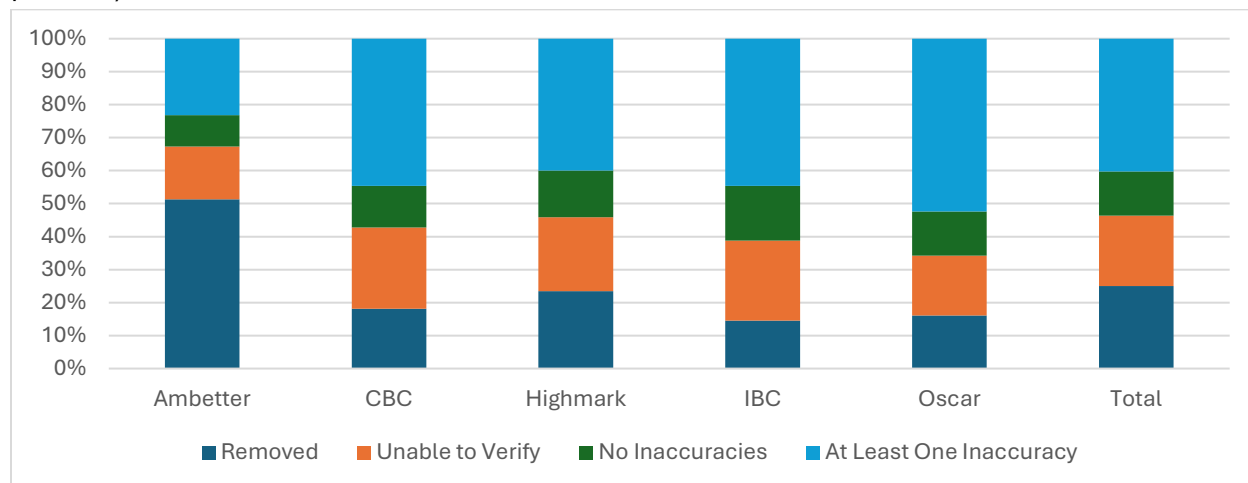


Figure 5: Percentage of Providers Removed or Verified as Accurate or Inaccurate, by Carrier, Re-survey of Survey 1

Table 3: Provider Verification Data, by Carrier, Re-survey of Survey 1

Carrier	Overall	Removed		Unable to Verify		No Inaccuracies		At Least One Inaccuracy		Contact Information Issue	Inaccurate Specialty	Out-of-Network
		N	%	N	%	N	%	N	%			
Ambetter	306	157	51	49	16	29	9	71	23	56	16	8
CBC	325	59	18	80	25	41	13	145	45	107	46	4
Highmark	683	160	23	153	22	97	14	273	40	202	88	11
IBC	240	35	15	58	24	40	17	107	45	87	23	3
Oscar	248	40	16	45	18	33	13	130	52	106	28	8
Total	1802	451	25	385	21	240	13	726	40	558	201	34

Differences Across Specialties

Differences across specialties (Figure 6, Table 4), while consistently statistically significant, were less pronounced. Across specialties, the rate of removal ranged from a low of 18.8% (N=38) for endocrinologists to a high of 34.3% (N=85) for obstetricians-gynecologists (p<0.001) while inaccuracy rates ranged from 32.9% (N=56) for dermatology to 43.5% (N=178) for neurology (p<0.019). Issues related to inaccurate contact information ranged from 25.3% (N=43) for dermatologists to 34.2% (N=140) for neurologists (p<0.036). Inaccurate specialty information ranged from 7.6% (N=13) for dermatology to 16.3% (N=50) for primary care providers (p<0.008). Finally, network status inaccuracies ranged from 0.9% (N=2) for cardiology to 3.5% (N=6) for dermatology (p<0.072).

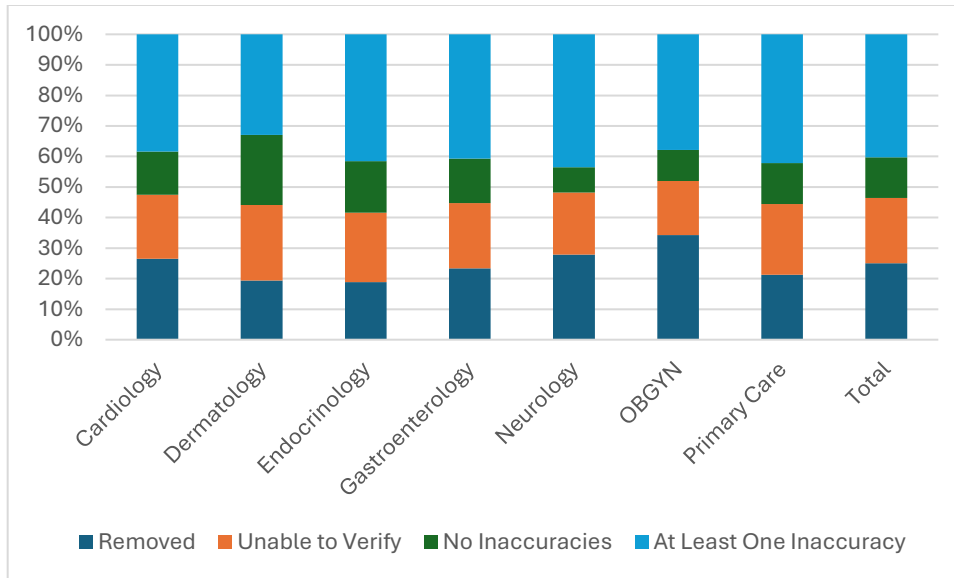


Figure 6: Percentage of Providers Removed or Verified as Accurate or Inaccurate, by Specialty, Re-survey of Survey 1

Table 4: Provider Verification Data, by Specialty, Re-survey of Survey 1

Specialty	Overall	Removed		Unable to Verify		No Inaccuracies		At Least One Inaccuracy		Contact Information Issue	Inaccurate Specialty	Out-of-Network
		N	%	N	%	N	%	N	%			
Cardiology	219	58	26	46	21	31	14	84	38	71	18	2
Dermatology	170	33	19	42	25	39	23	56	33	43	13	6
Endocrinology	202	38	19	46	23	34	17	84	42	64	28	2
Gastroenterology	248	58	23	53	21	36	15	101	41	81	19	7
Neurology	409	114	28	83	20	34	8	178	44	140	52	4
OBGYN	248	85	34	44	18	25	10	94	38	78	21	4
Primary Care	306	65	21	71	23	41	13	129	42	81	50	9
Total	1802	451	25	385	21	240	13	726	40	558	201	34

Differences Across Geographies²

Callers did not find statistically significant differences across the seven outcomes based on rural practice location (Figure 7, Table 5). However, removal of inaccurate listings was more likely in the combined metropolitan areas of Pittsburgh and Philadelphia compared to non-metropolitan areas (28.5% vs. 21.3%, $p < 0.001$). Callers also found overall inaccuracies to be lower in these

² To assess differences based on the geographic location of providers, the study relied to two measures. First, the list of rural zip codes provided by the Federal Office of Rural Health Policy was utilized to identify rural and non-rural providers based on their office location. These zip codes can be found here: <https://www.hrsa.gov/sites/default/files/hrsa/rural-health/about/forhp-eligible-zips.xlsx> Second, differences were also based on ACA pricing regions. However, due to the limited number of observations the two metropolitan pricing regions of Pittsburgh (region 4) and Philadelphia (region 8) were combined and compared them to the rest of the state. Out-of-state providers were assigned to the closest ACA pricing region.

metropolitan areas (36.1% vs. 44.9%, $p < 0.001$). This also applied to contact information issues (27.5% vs. 34.7%, $p < 0.002$) and inaccurate specialty designations (9.2% vs. 13.3%, $p < 0.004$).

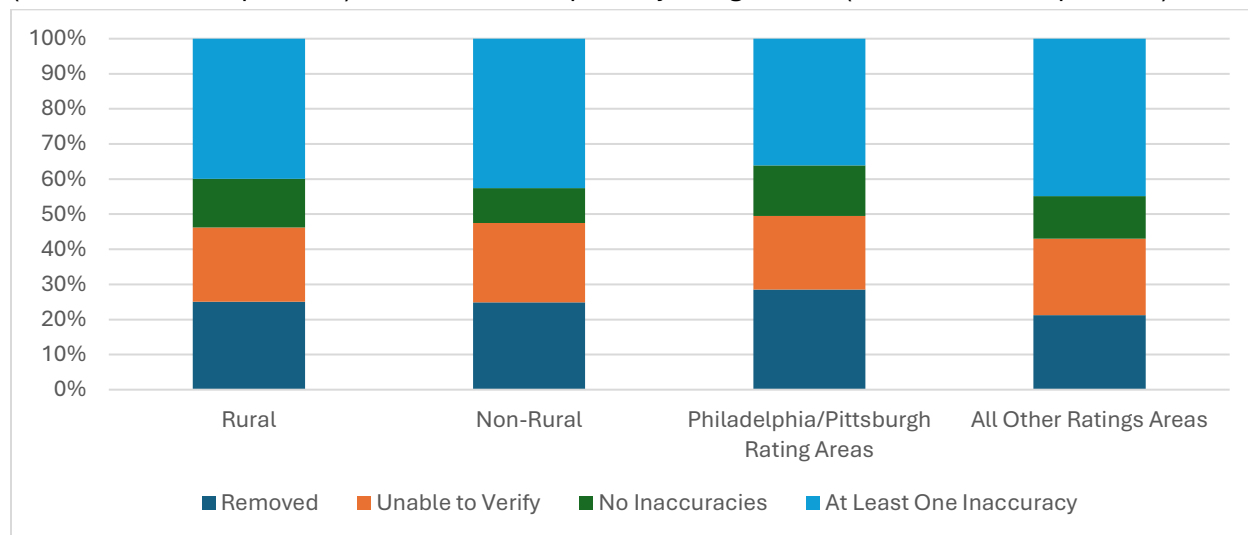


Figure 7: Percentage of Providers Removed or Verified as Accurate or Inaccurate, by Geography, Re-survey of Survey 1

Table 5: Provider Verification Data, by Geography, Re-survey of Survey 1

Specialty	Overall	Removed		Unable to Verify		No Inaccuracies		At Least One Inaccuracy		Contact Information Issue	Inaccurate Specialty	Out-of-Network
		N	%	N	%	N	%	N	%			
Non-Rural	1,581	396	25	335	21	218	14	632	40	489	173	29
Rural	221	55	25	50	23	22	10	94	43	69	28	5
Philadelphia / Pittsburgh Rating Areas	937	267	29	197	21	135	14	258	28	258	86	21
All Other Rating Areas	865	184	21	188	22	105	12	388	45	300	115	13
Total	1,802	451	25	385	21	240	13	726	40	558	201	34

Findings for Re-Survey for Inaccurate Providers Identified in Survey 2

Of the 5,170 providers provider listings identified in Survey 2, at the time of the re-survey 983 providers (19.0%) had been removed from the provider directory, 600 providers (11.6%) were listed without any inaccuracies, and 2,316 (44.8%) providers were listed with at least one inaccuracy at the time of the re-survey. Callers were unable to reach 24.6% (N=1,271) of providers. Inaccurate contact information was again the most prevalent listing error (N=1,860, 44.8% of searched providers), followed by inaccuracies related to medical specialty (N=472, 9.1%). Inaccuracies related to network status were less common, occurring for 3.7% of providers (N=189). Among those providers who continued to be listed inaccurately, the mean number of days between survey contacts was 190 days (median 189).

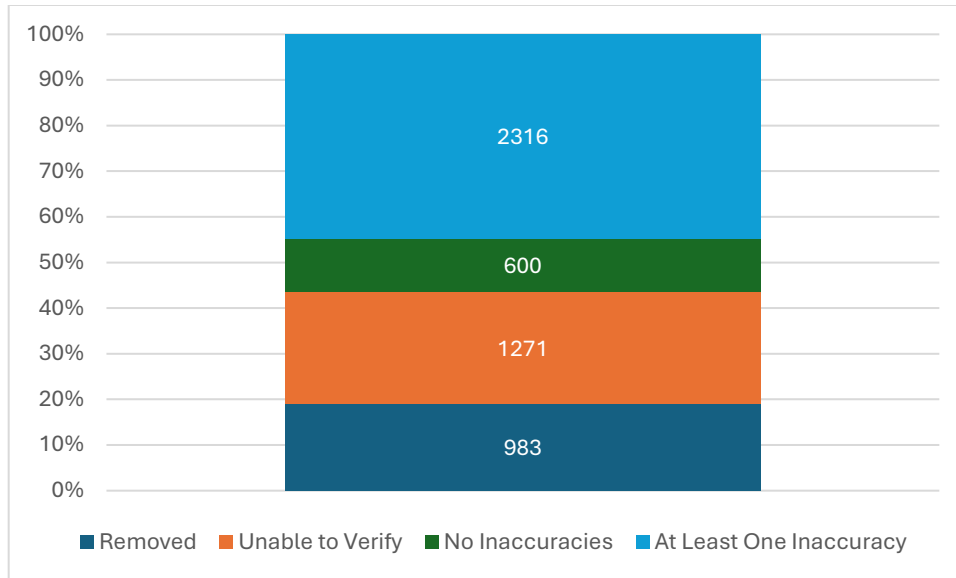


Figure 8: Count and Percentage of Providers Removed or Verified as Accurate or Inaccurate, Re-survey of Survey 2

Differences Across Carriers

Callers again identified substantial differences across carriers (Figure 9, Table 6). For example, Ambetter removed 35.1% of the previously inaccurately listed providers (N=342), while this was only the case for 8.9% of providers (N=41) for IBC (p<0.001). Inaccuracies ranged from 35.0% (N=229) for UPMC to 53.0% for Oscar (N=245, p<0.002). Inaccuracies related to contact information were most common (N= 1,860, 36.0%). These errors ranged from a low of 26.7% for Geisinger (N=60) to a high of 45.0% (N=208) for IBC (p<0.001). Incorrect specialties listed were identified for 9.1% of contacted providers (N=472), ranging from a low of 6.3% for UPMC (N=41) to a high of 11.3% (N=26) for CBC (p<0.002). Lastly, 3.7% (N=189) of contacted providers were out-of-network, ranging from 1.7% (N=15) for Highmark to 6.7% (N=80) for Oscar (p<0.001).

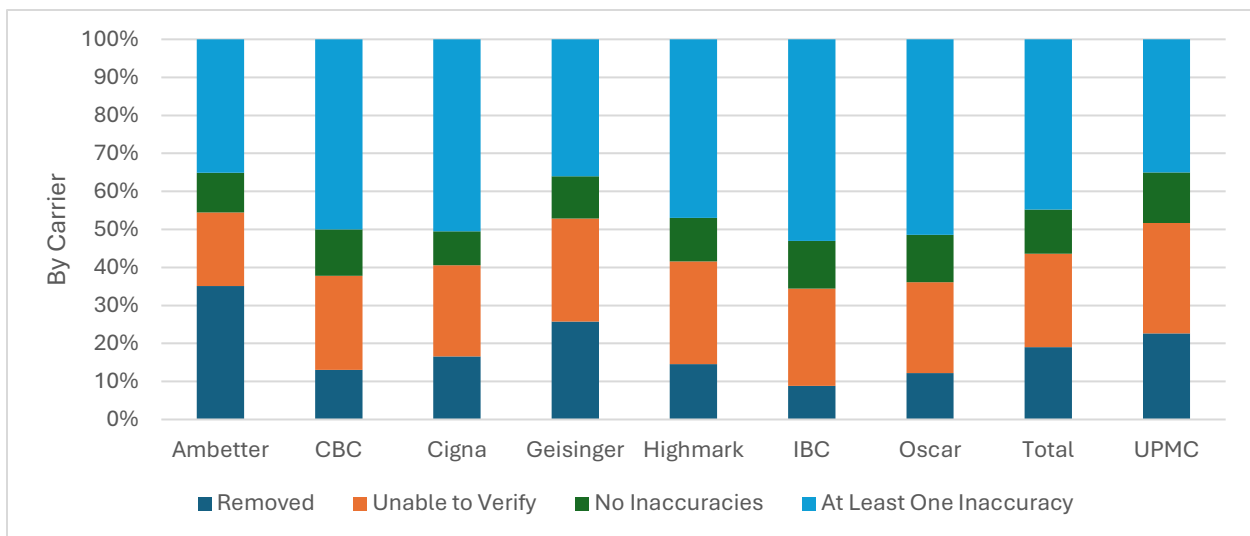


Figure 9: Percentage of Providers Removed or Verified as Accurate or Inaccurate, by Carrier, Re-survey of Survey 2

Table 6: Provider Verification Data, by Carrier, Re-survey of Survey 2

Carrier	Overall	Removed		Unable to Verify		No Inaccuracies		At Least One Inaccuracy		Contact Information Issue	Inaccurate Specialty	Out-of-Network
		N	%	N	%	N	%	N	%	N	N	N
Ambetter	975	342	35	189	19	102	11	342	35	275	67	43
CBC	230	30	13	57	25	28	12	115	50	91	26	8
Cigna	513	85	18	123	24	46	9	259	51	217	44	12
Geisinger	225	58	26	61	27	25	11	81	36	60	24	4
Highmark	909	132	15	246	27	104	11	427	47	350	100	15
IBC	462	41	9	118	26	58	13	245	53	208	41	10
Oscar	1202	147	12	287	24	150	13	618	51	476	129	80
UPMC	654	148	23	190	29	87	13	229	35	183	41	17
Total	5170	983	19	1271	25	600	12	2316	45	1860	472	189

Differences Across Specialties

There were more modest differences across specialties (Figure 10, Table 7). The percentage of removed provider listings ranged from a low of 13.0% in dermatology (N=32) to a high of 22.7% for OBGYNs (N=86, $p < 0.003$). Rates of inaccuracies also varied by specialty, with a low of 38.2% (N=190) in pediatric psychiatry to a high of 52.2% (N=204) for pediatrics ($p < 0.001$). Errors in provider contact information ranged from 29.1% (N=127) for primary care to 42.7% for gastroenterology (N=150, $p < 0.001$), whereas inaccurate specialty listings ranged from 6.4% (N=32) for pediatric psychiatry to 14.4% (N=63) for primary care providers ($p < 0.001$). Lastly, cardiologists were least likely to be inaccurately listed as in-network (N=5, 1.5%) as compared to 6.9% (N=17) of dermatologists ($p < 0.002$).

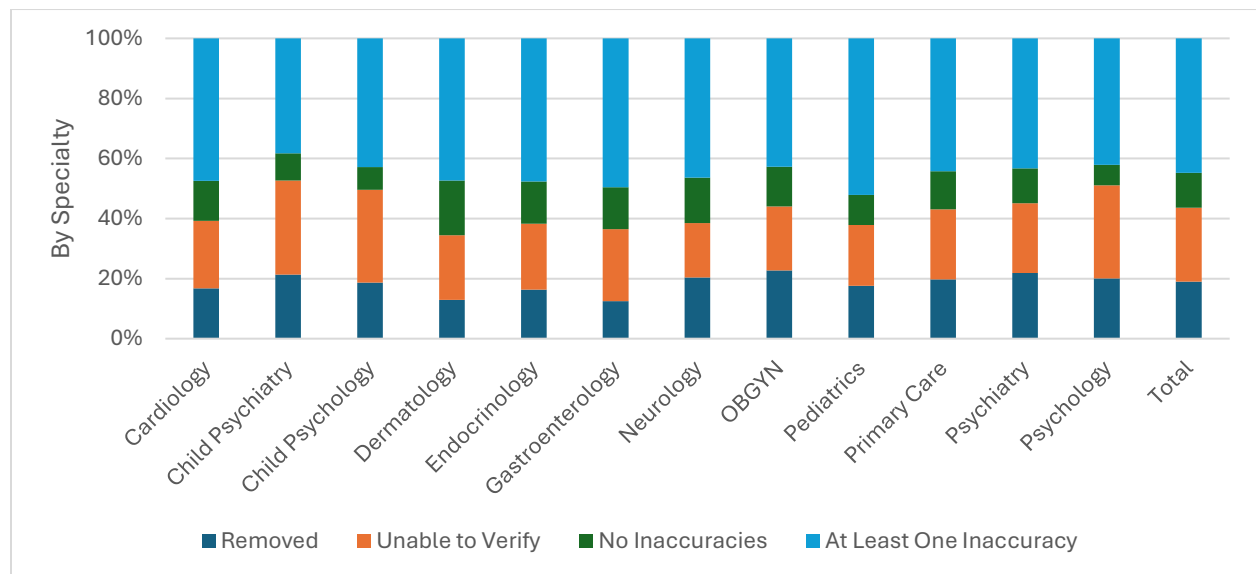


Figure 10: Percentage of Providers Removed or Verified as Accurate or Inaccurate, by Specialty, Re-survey of Survey 2

Table 7: Provider Verification Data, by Geography, Re-survey of Survey 2

Specialty	Overall	Removed		Unable to Verify		No Inaccuracies		At Least One Inaccuracy		Contact Information Issue	Inaccurate Specialty	Out-of-Network
	N	N	%	N	%	N	%	N	%			
Cardiology	329	55	17	74	23	44	13	156	47	133	24	5
Child Psychiatry	497	106	21	156	31	45	9	190	38	160	32	18
Child Psychology	504	94	19	156	31	38	8	216	43	182	34	20
Dermatology	247	32	13	53	22	45	18	117	47	92	19	17
Endocrinology	300	49	16	66	22	42	14	143	48	120	26	8
Gastroenterology	351	44	13	84	24	49	14	174	50	150	28	13
Neurology	515	105	20	93	18	78	15	239	46	189	59	16
OBGYN	379	86	23	81	21	50	13	162	43	125	46	9
Pediatrics	391	69	18	79	20	39	10	204	52	154	55	19
Primary Care	436	86	20	102	23	55	13	193	44	127	63	19
Psychiatry	663	145	22	154	23	77	12	287	43	236	45	28
Psychology	558	112	20	173	31	38	7	235	42	192	41	17
Total	5170	983	19	1271	0.25	600	12	2316	45	1860	472	189

Differences Across Geographies

Callers did not find statistically significant differences across the seven outcomes based on rural practice location (Figure 11, Table 8) with the exception of differences with regard to inaccurate specialty listings, which were marginally significant (9.4% vs. 7.1%, $p < 0.080$). However, removal of inaccurate listings was more likely in the combined metropolitan areas compared to non-metropolitan areas (21.1% vs. 17.6%, $p < 0.002$). Callers also found overall inaccuracies to be lower in the metropolitan areas (42.6% vs. 46.3%, $p < 0.010$). This also applied to network status issues (3.0% vs. 4.1%, $p < 0.029$).

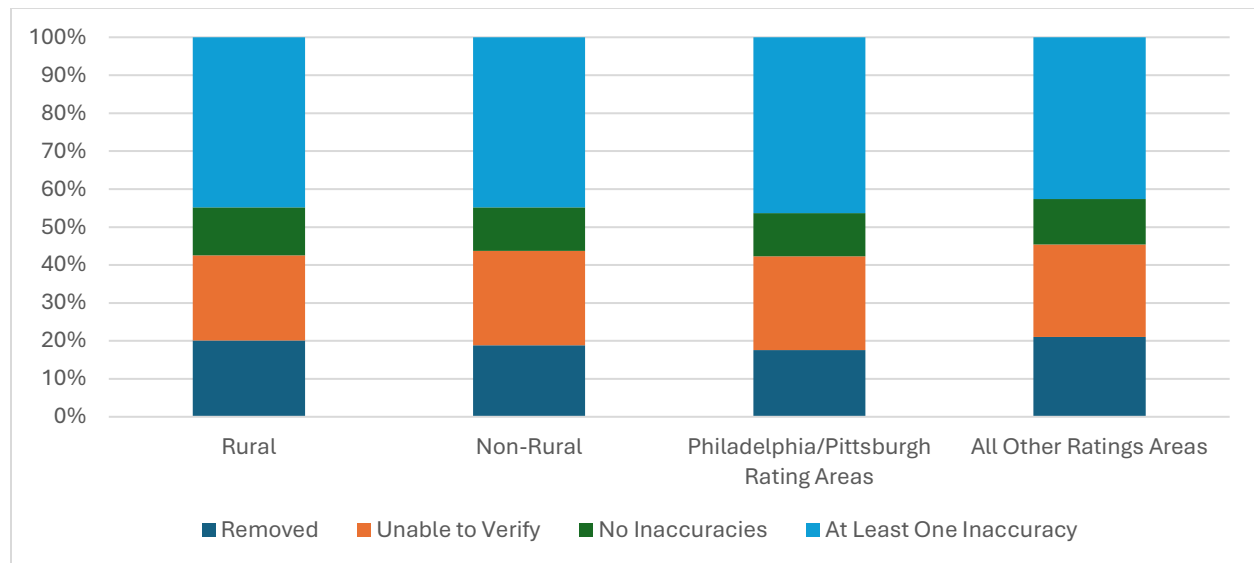


Figure 11: Percentage of Providers Removed or Verified as Accurate or Inaccurate, by Geography, Re-survey of Survey 2

Table 8: Provider Verification Data, by Geography, Re-survey of Survey 2

Specialty	Overall	Removed		Unable to Verify		No Inaccuracies		At Least One Inaccuracy		Contact Information Issue	Inaccurate Specialty	Out-of-Network
		N	%	N	%	N	%	N	%	N	N	N
Non-Rural	4608	870	19	1145	25	529	12	2064	45	1646	432	175
Rural	562	113	20	126	22	71	13	252	45	214	40	14
Philadelphia / Pittsburgh Rating Areas	2122	447	21	517	24	253	12	905	43	742	183	63
All Other Rating Areas	3048	536	18	754	25	347	11	1411	46	1118	289	126
Total	5170	983	19	1271	25	600	12	2316	45	1860	472	189

Discussion

Inaccuracies in provider directories persisted for a substantial period of time across all carriers and specialties in the Pennsylvania ACA Marketplace analyzed. These findings run counter to the requirements specified by recent federal law that carriers verify and update provider directories at least every 90 days. The analyses identified substantial variation in provider directory inaccuracies, particularly by carrier, and, to a more limited degree by specialty. Geographic differences, when present, were generally smaller.

Contributing factors to persistent inaccuracies may include inadequate administrative capacity to verify and update provider directory information.¹⁶ The findings also indicate that carriers may take different approaches to network adequacy verification, with variation in staffing, resources, administrative capacity, and institutional knowledge that could affect the frequency and accuracy of these efforts. Differences in rates of corrective action across carriers suggest potential administrative, operational, and health information technology levers that may facilitate more accurate and timely verification.²⁴ Providers participating in insurance networks may also experience challenges responding to different processes, documentation, and timelines for directory requests from multiple insurers. Better accuracy rates in metropolitan areas, albeit limited, may be explained by carriers prioritizing updates in areas with more claims or enrollees. Given that directory accuracy may rely on the willingness or ability of providers to respond to heavy administrative demands involved with verifying, maintaining, and updating their information, it is plausible that providers in metropolitan areas are more likely to be part of larger health systems that are better equipped to respond to these administrative demands.

The prolonged duration of provider directory inaccuracies has implications for patients, making navigation of the health care system more challenging, delaying access to care, and increasing the likelihood of out-of-pocket costs.²⁵ If consumers select plans based on faulty information, persistent inaccuracies may also prevent consumers from selecting plans that fit their needs and accessing their preferred providers. Lastly, the duration of provider directory inaccuracies

confounds efforts to respond to enrollees' needs. For example, insurance regulators may not be able to rely on directories to monitor and assess provider networks to produce reliable estimates of access to care and network adequacy, hampering the ability of regulators to provide helpful information to enrollees.

Policy Recommendations

The findings indicate several opportunities for positive policy changes. The differential findings for insurers may indicate different administrative procedures and resource commitments on the part of insurers. To increase transparency, insurers could be required to share their provider verification procedures as well as resource commitments with the Insurance Department. Suppressing providers from provider directories who fail to pass proper verification procedures until they can be fully verified would incentivize both providers and insurers to ensure accurate provider information. In addition, carriers could be required to suppress providers from their provider directories if they have failed to submit an in-network bill over a designated period of time. Stronger fines and penalties for non-complying insurers and providers could also provide better incentives to minimize inaccuracies. A centralized state provider registry that maintains accurate contact, specialty, and network information across insurers could offer a long-term technical solution. Irrespective of any specific policy changes, comprehensive annual secret shopper surveys could be put in place to assess insurer compliance to existing requirements as well as to assess changes over time. Findings from these surveys could be shared publicly as well as be made part of the information provided to Pennie consumers during their enrollment process. Lastly, resources for consumers in the form of patient advocates could help mitigate existing access challenges until long-term solutions can be implemented.⁸

Notes

For in-depth analyses see:

Haeder SF, Zhu JM. Inaccuracies in Provider Directories Persist for Long Periods of Time. *Health Affairs Scholar*. 2024;2(6):qxae079. doi:10.1093/haschl/qxae079

Haeder SF, Zhu JM. Persistence of Provider Directory Inaccuracies After the No Surprises Act *American Journal of Managed Care*. 2024;30(11).

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