

A Prescription for Savings: Address Management

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Every day more than one million incorrect addresses are entered into the nation's health data stream.

With more than 500 million bad addresses making their way into the paperwork of those seeking health care, the problem of bad addresses has taken on what almost qualifies as an epidemic of a spatial kind.

Studies have revealed that more than 4.5 billion claims are filed every year in the United States originating from hospitals, physicians, dentists, pharmacists, public health clinics, and social service agencies. The chances of a bad address getting into any of the systems that process these claims and registrations is fairly predictable (about 11%) and thus, the real costs associated with this error are fairly predictable as well: more than \$3 billion annually, not to mention the aggravation faced by everyone who must deal with the aftermath. The direct costs of a single bad address is estimated at \$6.22. This amount includes the costs of postage, paper and envelopes, and the labor required to correct and resend the original document. Do the math yourself— $500,000,000 \times \$6.22 = \$3,110,000,000$.

Let us conduct a 10-step analysis on the bad address.

1. It begins typically at a point of service (POS), for example, a hospital emergency room, a clinic or health care facility admitting area, a crowded physician's office, a pharmacy counter, or a dentist's waiting room. No one usually wants to give a health care provider a bad address; it just happens.
2. The clerk entering a client's address is typically in a hurry. There is a lot of paperwork to complete, and the patient may be in pain or anxious and is likely to be annoyed at the entire registration process. Anything that slows down the process of getting care or products is usually avoided.
3. The computer systems managing the collection of the information from the patient or consumer have few edits to protect against entering a bad address. Even limited functions, such as checking to see if a ZIP Code is present, have the potential of slowing down the registration process and are typically disabled. Without instant address verification, the registration clerk will typically forgo any in-depth verification of the address.
4. There are usually several addresses related to a typical health care encounter such as those of the patient, guarantor, insurers, and next of kin. Most clerks will attempt to at least get the insurer's address correct.
5. Addresses entered into the system incorrectly usually remain that way. Unless there is some specific reason to check the address, the magnitude of verifying each and every address is outweighed by the urgency to keep things moving.

6. Bad addresses begin to show their ugly side long after the registration event is over. The clerk who entered the bad address is the last to ever see or learn its impact. The first sign of trouble usually begins in the mailroom when a mailed document is returned because it is not deliverable by the post office. Sometimes it will be a returned EOB, or a bill, or worse yet, important test results. It surely will come back later than sooner, so the elapsed time the document is in limbo is usually weeks and months.
7. In most large health organizations a mailed document with a bad address will likely never really be dealt with in any systematic fashion. While the bad address may get fixed manually, the chances are highly unlikely that all the computerized databases containing the bad address will also be fixed.
8. The death of a bad address often occurs in the mailroom. Administration or management seldom sees this happening, and the accumulation of such events becomes another "miscellaneous" expense—simply the cost of doing business.
9. If the mailed piece is not thrown out in the mailroom, someone (not a computer) must look at this document and its address and determine what went wrong. Sometimes the post office gives a clue by noting, "no such address," or "no forwarding address available" if sufficient time has elapsed, or "insufficient address."

All such messages mean someone will have to do some research to salvage the communication and get it to its correct destination. If it is a bill, it will likely be written off as bad debt. The research may require several phone calls, a trip to the chart room, or assignment to a collection or forwarding agency. Needless to say, the value of a document with a bad address deteriorates in direct proportion to the amount of time it takes to find and rectify the bad address.

10. The bad address continues to live on within the entire health care system. If the address was submitted electronically, which occurs about 65 percent of the time, it has now spread to at least three other health organizations. It has also spread to the marketing and planning departments of these organizations, which conduct sophisticated analysis based on the locations of their customers. What started as only half a billion bad addresses has now grown into 3 billion bad addresses!

Enough Already

Enough already you say. How bad does this problem have to become before management takes corrective action?

The solution is called address management. By simply embedding a powerful address management and address matching, or geocoding, system into an existing POS registration application, bad addresses can be "fixed" and geocoded instantly.

Address management allows registration clerks to immediately verify, correct, and geocode addresses in seconds while the person providing the information is still in front of them. Large health organizations, such as hospitals, managed care organizations, and public health departments, that collect thousands of street addresses daily in the course of serving patients or clients can realize tremendous cost savings while improving the overall quality and accuracy of the data they collect and use in their decision support processes. Most of all, better address management means better data for use with geographic information system technology, for which accurate patient addresses are critical.



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