



## Insights into Patient Privacy and Online Reviews

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Online reviews are becoming more important in a modern healthcare practice and can make or break healthcare practices. The Institute of Healthcare Policy's study (2014) found that **94 percent of internet users consider online reviews of doctors helpful**. Reviews have a significant effect on purchasing decisions and customer retention. The reviews considered helpful include both positive and negative ones. In an effort to address negative reviews, healthcare practitioners often respond to online reviews posted of their services.

However, these responses can often expose Protected Health Information, or PHI, as defined in the Health Insurance Portability and Accountability Act (HIPAA). HIPAA is an important healthcare privacy law which determines what types of disclosures of PHI are legal. It is important to consider which violations may commonly occur in these responses and how to address them in order to prevent HIPAA violations. We performed research and analysis to determine some common violations to guide businesses in preventing these HIPAA violations.

To develop this guidance, we used the [Yelp Dataset](#), which consists of millions of reviews in various categories, to first find a set of thousands of healthcare practice reviews. To find healthcare reviews, we created a Python script to search through each of the 6,685,900 reviews and isolate the ones which were related to healthcare services in a separate file. We determined which reviews were medically related by first finding the 12,573 businesses in the dataset which were classified as being in the medical field. Then we isolated all the reviews in the dataset which pertained to medical or healthcare businesses. Next, we used the [Vader](#) sentiment analyzer, which determines the general emotion of a piece of text, either positive or negative, to determine which reviews were negative. This processing resulted in a set of 30,839 reviews. Then, the Yelp API was used to find the URL for that review. Since the API does not return business owner response, we had to manually check for the owner responses by accessing the web version of Yelp. Due to an API limitation, the analysis was limited to 5,000 reviews, so we limited our dataset to 5,000 random reviews which were then processed with the Yelp API. An acceptable

level of randomness was ensured by using a Python random number generator to pick random reviews. Once this set was isolated, we analyzed the individual responses to determine potential HIPAA violations. Our data consisted of 4,976 reviews, but not all of these contained owner responses. For purposes of analysis, we used another Python script to select a random sample of 100 reviews.

While reading these reviews, we developed some key insights into common issues regarding the privacy of health data and developed recommendations to address these issues.

- **Practitioners do not realize the many different forms healthcare data that are currently being generated.**
  - Currently, healthcare data is present in many forms, such as Apple Watch data to reviews on Yelp and is not confined to traditional forms such as patient charts. We recommend that practices train their staff members to understand that patient health data takes many forms and may be generated by a multitude of devices and applications. Staff members should learn to manage and account for the various forms of PHI in their work.
  
- **Practitioners often fail to sanitize PHI within their responses to reviews.**
  - Numerous instances of PHI exposure on Yelp and other review sites occurs when responding to a negative review. Responders can quickly lose their tempers and inadvertently expose confidential information. Even though a patient exposes their own PHI, it is in violation of HIPAA for a business to also disclose PHI without express authorization. A patient does not waive their HIPAA rights by posting his or her information. In 2013, Shasta Regional Medical Center paid \$275,000 to settle claims that it violated HIPAA when it disclosed a patient's health information to the media in response to a negative newspaper article ([press release](#)). We recommend an approach for service providers to respond to negative reviews without violating privacy laws.

- **The most common mistakes that practitioners make is that they reveal the identity of the patient.**
  - Within our sample, 77 out of a 100 randomly selected reviews inappropriately confirmed that the patient was in fact a patient at the practice. Redirect the response to encourage them to reach out to you directly to discuss their concerns. Do not confirm that the reviewer is a patient. Posting any information that identifies the individual as a patient likely violates HIPAA even if specific medical information is not disclosed.
  - Responses should be general and policy-based. Do not address the specific issue or anything which identifies the patient. Always offer to take the conversation or feedback *offline*.
  
- **Arguing with negative reviews isn't worth the consequences of disclosing PHI.**
  - We found that even when practitioners used PHI to support their response to reviews, reviewers did not change their reviews and often accused the business of attempting to cover up bad practices. Within our sample, 31 out of 100 customers' reviews that received responses did not modify their review, and 18 out of that same 100 accused the business of covering up bad practices. Whether the reviewer did or did not do/experience what they claim to have is irrelevant in an online review. A "shouting match" with reviewers will not improve the reputation of your business or help you remain compliant with privacy regulations. We recommend utilizing a standard method for responding to reviews to prevent emotions from becoming included in the response.

## **Sample Response from a Practitioner**

Let's look at a portion of an inappropriate response from a practitioner and how an appropriate response should be crafted:

### **Inappropriate response:**

*"Despite management digging deep in our accreditations with our filler manufacturer to find a cheaper way for clients like you to feel the most beautiful they can for an affordable rate (and finding a way to keep you as a client in the future), the staff was happy to see you when you walked in. You were kindly greeted, as always, the aestheticians warmly took you back, prepped you and readied you for your additional 2cc's our front office had broken their backs to get worked out for you.*

*However, when it came time to pay the other half of your 3cc's of filler (\$700.00 each buy 2 get 1) you were not the same Abby. You were angry, you were under the impression that you were getting 2cc's as well as 2 additional cc's each time you paid \$700.00. You would not leave because you claimed a competing spa charged less for more product and you threatened our staff expressing you would not be leaving until you get what the competing spa would've given you for what you spent, because you "Already spent money here" the staff was shocked.....having never called security on any client EVER in our three years of having being opened it was one of the most horrific experiences having to watch someone that everyone in the office loved be escorted out".*

In this response, the practitioner exposes multiple pieces of PHI. For one, they exposed the simplest piece – they confirmed that the patient is in fact a patient. This information is confidential under HIPAA, meaning it is a violation. Furthermore, this response also exposes details of the procedure which this patient had, such as the specific procedure which was completed. This response has multiple HIPAA violations in it.

**Appropriate Response:**

*Thank you for reviewing your experience at {Business Name}. We are so sorry that you were not satisfied with our service. It is our policy to protect patient information and discuss important matters offline. Please contact us at {Business Phone Number} so we can resolve your issues and ensure that you remain satisfied.*

*Sincerely,*

*{Business Name} Staff*

This response addresses the reviewer's needs and allows the customer to know that you truly care about their needs. Furthermore, it is also HIPAA compliant as it does not expose any PHI. This response, or one like it, is a great way to defend your business and turn the conversation away from Yelp. Remember, do not confirm the reviewer is patient, do not expose PHI, do not get into a "shouting match". Turn the conversation away from Yelp and to a private method of communication.

These key tips will allow you to maintain compliance with HIPAA and to ensure that patient information is kept confidential while defending your business and putting forward your business's best face online.

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