

Eight Commandments of Reliable Healthcare Data

Settling the Wild West probably felt like a promenade in the park compared to the new frontier of capturing reliable healthcare data. You are challenged with dueling stakeholder interests, continually changing regulatory requirements and never enough time, money or personnel. As you navigate through this uncharted territory you need a framework as strong as the sturdiest homesteader's wagon if you ever hope to successfully create databases of reliable healthcare data.

These eight commandments will guide you in the correct selection of the data elements required to meet the growing regulatory reporting requirements, develop a research project or populate an electronic health record.

1. Work backwards.

Before you launch *any* project involving healthcare data you must be clear about where you hope and need to wind up.

- What question are you trying to answer?
- What problem are you hoping to solve?
- What requirement do you need to fulfill?

Without this end point clarity, you'll spin your wheels and waste your money, and may never even arrive at a useful conclusion. When you "work backwards," on the other hand, you stay on the path to your objectives.

2. Don't recreate the data wheel.

Do *NOT* create data elements that are unique to your project, organization or individual needs. The healthcare world is littered with abandoned databases built on one-of-a kind data elements that have been used to populate one project, write one paper or fulfill the whims of one individual.

Rather, begin by asking:

- Do the data elements already exist?
- What elements are other groups/departments within my organization capturing?
- What external data libraries and standards are available?

The adoption and use of common data elements makes your data more generally applicable and allows for both internal communication and comparisons with other institutions. Remember, as the saying goes, you should only compare apples to apples and oranges to oranges. The same holds true for healthcare data.

3. *Know and include your data's pedigree.*

You must understand your data's pedigree in order to evaluate if it is aligned with your goals and objectives.

- How were the data elements developed and validated?
- How are they defined?
- What is the intent of the data element?
- Is the data element an essential must-have, or a desirable nice-to-have?
- What is the data element used for in your project?

Document your data's pedigree and give it visibility any way you can. Just like the children's game "telephone," where a message is whispered from child to child and unfailingly blurted out by the last child as gibberish, failure to understand your data's pedigree and to document it for reference will result in it being interpreted and communicated *differently* from user to user until it no longer reflects its original meaning.

4. *Understand to whom you are singing.*

Identify and understand your stakeholders. Are they:

- Primary stakeholders who are responsible for helping to create and capture the data and/or providing the funding for it?
- Secondary stakeholders who benefit from knowledge of the data or are impacted by the results, but who were not necessarily instrumental in establishing the data or providing the funding for it?
- Both primary and secondary stakeholders?

Examples of stakeholders include clinicians, patients, regulatory agencies, third-party payers, researchers and products manufacturers.

Once you understand who your stakeholders are, you will be able to successfully follow Commandment #5.

5. *Tell them what's in it for them.*

For each stakeholder involved, determine their stake in the game. Different people have different interests and they'll only help you if they believe you are helping them to meet their goals and objectives. Take the time every step of the way—as you capture, manage, analyze and communicate—to speak from the stakeholder's point of view and interest.

6. *Kick your data tires—hard.*

It'll be a non-starter if the data is not monitored and audited to ensure that it is being captured correctly. Without exception, all data must be internally audited both randomly and on a schedule. Ongoing electronic data monitoring does not replace internal auditing.

- Establish a policy and procedure to internally audit your data and fully commit to it. Do not rely on external regulatory agencies to verify your data for you.
- Do not assume electronically captured data and algorithms are automatically correct. Audit them too.

Rest assured, the first time that your data loses credibility, *you* will have lost your credibility as well. At that point, both you and your data are pretty well done. Never, ever assume that your data is completely correct and reliable; take steps to know it and prove it.

7. *Bring in a fresh pair of eyes.*

You know how it goes. You look at the same thing over and over and over again and you just stop seeing it after awhile. Invite new people to join your group and review your reports. Sometimes, all it takes is a new set of eyes to evoke an “aha” moment.

8. *Buy a data management lawnmower.*

Effective data capture, management and communication is like mowing the lawn. As soon as you cut the last blade of grass, the first blade is already growing again! Set a schedule to revisit the original goals of your project and to test if your data elements are still in alignment with them. In your review include:

- Project outputs compared to original goals
- Audit results
- Analysis of the burden to capture the data versus the value it adds
- Changes to data definitions
- New reporting requirements
- Stakeholders' input about ways to add value

Be certain to summarize your work and report it back to the stakeholders with next steps and scheduled updates. Creating and working within a well defined structure and system to assure that you keep your data relevant and valuable will result in a vibrant data lawn that is the envy of the neighborhood.

By following these Eight Commandments you will be able to confidently develop and manage any project involving healthcare data.—and avoid a shootout at the Healthcare Data Corral.

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