



Data Analyst vs. Informaticist....Tomato-Tomahto?

The use of data in the healthcare setting is not new. Entities like John Snow, Florence Nightingale and Edward Jenner would not be as well known today had they not used the information around them to affect the health of their community whether it be by taking the pump handle out of a contaminated well (John Snow); creating a public health nursing protocol using evidence from battle injuries (Florence Nightingale); or creating an entire new field of vaccination for disease prevention (Edward Jenner). What is new is our ability to access the information at much quicker pace than ever before. The integration of technology- both in the form of diagnostic tools as well as records keeping- has made the difference in a number of conditions.

But what do these data really tell us? How can we optimize the information gathered to have the greatest impact on patients (preferably at the lowest cost)? These are some of the common questions one asks when delving into the field of healthcare data. This is also where the subtle difference between a data analyst and an informaticist becomes the most clear. Part of the challenge to differentiate between the two is that they use similar skills to obtain their results. Both data analysts and Informaticist utilize statistical analysis tools, calculations, graphs and/or tables to provide information on the data provided. What is different is to what extent they explain the data. For example, if a data analyst is given cervical cancer screening data, they will report how many screenings were done over a certain amount of time, possibly the age breakout and maybe even the graphical depiction of when over the course of time the most screenings were done. An informaticist, however, would go beyond just the data provided to include in their report aspects of health care protocols that may be influencing the rates, socioeconomic factors that play a role in screening, and which timeframes may be most beneficial to optimize screening. The difference is subtle, but when trying to implement initiatives and programs to change the clinical care measures many health centers are responsible for, these additional factors can make a significant impact.

“Does this mean I have to hire another data person??” Not at all. The best thing about both a data analyst and an informaticist: they have the same skill set! Thereby the change in output is more about expectation and explanation. All too often, data analysts are somewhat silo-



ed and only asked to perform specific tasks without a full explanation of the need that produced said task. Instead of asking, "I need the cervical cancer rate for this year", one could say, "I'm looking to apply for a grant to improve our cervical cancer screening rate. I need our current rate broken down by month, age, and clinic. And if there's any lab data or other women's health data points that could help explain our rate, which would be great, too". There's a high likelihood that the data analyst performing this request will provide more than expected. What's also important to note is the scope of the second question. The old adage, "you don't know what you don't know" is painfully true in many aspects of our healthcare system. We often still focus on one aspect of health, such as a screening, and not the larger picture of social determinants of health and/or our billing protocols, to our detriment. For instance, if we know that women tend to get screenings done more often in the fall, because their schedules are lighter or more often in the evening after work, perhaps we can find a way to use that information to inform how we go about increasing our screening rates.

None of these changes occur overnight, but it is imperative that we at least begin to utilize our resources to their maximum capacity which is possible by working together more collaboratively (see what I did there? 😊) across departments. It may seem like a "marathon goal", but taking the time to fully understand and appreciate the capabilities of healthcare data and those who can help make it meaningful is a step we can take now.