



IT SPOTLIGHT: IT OUTSOURCING

Outsourcing of Information technology resources and infrastructure is a trend that continues to gain momentum in healthcare. It is too often seen as little more than a cost center and support role even though technology is driving healthcare innovation and effectiveness. Despite the cost savings and specialized skills outsourcing can bring to healthcare organizations, it also presents challenges such as communication barriers and differences in organizational culture. Unfortunately, many organizations outsource critical technology functions while providing little or no oversight or management to the outsourced vendor. There needs to be someone in the organization with strong IT skills to work closely with the outsourcer to monitor performance effectiveness and demand excellence.

Health IT Spotlight: Bias in Analytics

In the age of data-driven decision-making, analytics has emerged as a powerful tool for healthcare organizations and clinicians to gain insights and drive innovation. However, lurking beneath the surface of this seemingly objective and impartial realm lies a subtle yet pervasive challenge: bias in analytics. It refers to the presence of systematic and often unintended errors or prejudices in the data, algorithms, or analytical processes used to draw conclusions. This bias can arise from various sources, including data collection methods, sample selection, algorithm design, and human decision-making.

This can potentially cause erroneous assumptions, incorrect symptom determination, and worse of all ineffective treatment plans. While minority groups are often most affected, this inherent bias may affect anyone if the data used does not include the representative population.

To combat this, there are some ways that bias can be eliminated in analytical models used for decision-making.

- Defining the affected population that needs to be analyzed and using rich, longitudinal data to match. Data-driven technology only works based on the data it is provided. Models need to be trained with rich data sets that incorporate broad ethnographic coverage such as race, sex, ethnicity, socioeconomic status, and geography. The desired model may sometimes be too hard to develop, so limitations should be presented so that individuals who using them fully understand the data that has been used to develop them.

- A predictive model trained to identify unplanned or emergent inpatient events covers a much broader group of individuals than one trained on a static group of inpatient admits. This data will more accurately mirror the current patient population. It also has the added benefit that an intervention may better impact the current healthcare event.
- Apply a critical eye to algorithmic outputs: You can't undo model bias by tweaking the outputs to make it "fairer," but you can make bias mitigation and outcome equity focus areas in your model validation process. If the proportions of different racial, ethnic, and other demographic groups are wildly different in model outputs compared to your patient population, it's not unreasonable to pause and ask why. It doesn't mean such differences are "wrong" (or that perfect parity would be "right"). However, it does prompt the question of whether strong differences have a biological or operational reason, as opposed to a source bias.

Ensuring good and relevant data as well as striving for fairness and questioning disparities in results can help organizations make more informed, ethical, and equitable decisions in the data-driven landscape.

Upcoming Events

CPHIMS/CAHIMS Bootcamp

CPHIMS & CAHIMS are professional certifications sponsored by HIMSS the leading healthcare technology membership organization.

Why Take the Exam?

- The demand for skilled Health IT & Analytics individuals continues to increase
- Open up additional career opportunities
- Individuals who have passed these exams have increased their marketability and salary
- Show your knowledge and skills to yourself and employers

Details:

Mondays starting November 8 for 6 weeks. 6:30 – 8:30pm ET

For more information contact us at info@healthitinstitute.org

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