Rethinking Risk-based Monitoring as Value-based Monitoring

What we can learn from Halloween trick-or-treaters
An introduction to the data (candy) collection team
The Phase I days of candy collection

When the girls were young, we only visited a few neighbors...
We had high confidence in the data
and of course, they considered all of their candy “critical”
Phase III of candy collection

As they got older we sent them out into the real world
the number of houses increased...
and so did the amount of candy
That’s a lot of candy

As the candy monitors, we could no longer trust it all
So what to do?
Option 1: Drop one third

If you can’t have it all, what to give up?
Maybe just sweep away 1/3\textsuperscript{rd} of it
Will that work?

No!
Option 2: Random sampling

Line all the candy up, and take away every third one
Option 2: Random sampling

Will that work?

Clearly not!
Here’s how our girls solved the problem on their own

With value-based candy management
First, Categorize
Then, Prioritize
Then, Prioritize
Now the problem of eliminating 1/3rd is easy

Didn’t even need to spend much time on the task
Not worthless, just valued less
Could give up ½ and not be too sad
The methodology even scales to “you can only have one”
Focus on value when thinking of RBM

Value-based Monitoring (VBM)

Every data point or procedure has a value
Value is constant - risk is variable
The concept of value appears always exists and is inherently understood
A Real-world Example – Partners PrEP
85 million data points -> 141 key data points
Prioritized by value

Primary  Safety  Adherence  Behavioral  Screening  Enrollment  Lab
Characteristics  Physical  Con Meds  Medical  Administration  Ancillary
If 2/3rds had to be de-prioritized
And then after you categorize and prioritize all of your data, you can take a nap.
Thank you

From all of us at DF/Net