CORD Conference Calculation Handout – Matthew Hysell, MD

Seventy percent conference attendance is required of residents. Inevitably some residents fall behind on their conference attendance and the question arises as to how many conferences they need to attend to catch back up to the required 70% attendance rate. This formula demystifies the calculation.

THE EQUATION

To explain the equations, the variables are coded as follows:

A = conference hours Attended so far

P = conference hours Possible so far

N = conference hours Needed going forward

R = percent of conferences that will be Reasonably attended going forward (with percent expressed as a decimal)

The 70% requirement is converted to 0.7 for calculation purposes

$$0.7 = (A + RN)/(P + N)$$

$$0.7(P + N) = A + RN$$

$$0.7P + 0.7N = A + RN$$

$$0.7P - A = RN - 0.7N$$

$$0.7P - A = N(R - 0.7)$$

$$(0.7P - A)/(R - 0.7) = N$$

$$\mathbf{N = (0.7P - A)/(R - 0.7)}$$

For example, a resident has attended 95 out of 160 hours of conference (so A=95hrs and P=160hrs). We expect them to attend 90% of conferences going forward (so R = 0.9). The calculation then follows:

$$\mathbf{N = (0.7P - A)/(R - 0.7)}$$

$$N = (0.7(160hrs) - 95hrs)/(0.9-0.7) = (112\ hrs - 95hrs)/(0.9-0.7) = 17hrs/0.2 = 85hrs$$

N = 85 hours

Therefore, if the resident attends 90% of the next 85 hours (77 hours) then they will reach 70%.

For an excel spreadsheet with this formula already inputted:

https://drive.google.com/file/d/1DvfByqr9YcBONkLuD55QOmvGrs3Kkyc1/view?usp=sharing

Questions? (or just want the file shared directly?) Feel free to email me: mhysell@lakelandhealth.org