(LEADERS) MODULE 2 ACTIVITY

Calculating the Cost of Implementation Overload

Programs vary in the number of patients in a clinic they *can service at any time* **(Reach**) and *how many they, on average, actually help* (**Effectiveness**)

And clinics vary in how well they implement the key components of those programs (**Fidelity**). There is little data on how well hospitals, clinics, and other healthcare institutions implement programs, so a general 60% fidelity has been selected for illustration in this exercise.

Program	Reach	Effectiveness	Fidelity	Overload Reduction
A	.75	.40	.60	.10
B	.50	.90	.60	.10
C	.25	.60	.60	.10
D	.10	.80	.60	.10

Above are 4 programs for well-being. Program A is a well-being for staff that is expected to not only help staff but also help patients because staff are healthier. The other programs are patient-focused. To orient yourself to this table, program A reaches about 75% of a given population. It's effectiveness with this real-world population is 40%, i.e., about 40% of patients experience optimal benefits from this program. Since this is a staff well-being program, it is saying that about 40% of patients received "downriver" benefits from their healthcare professionals being healthier. Fidelity means this program is being implemented with 60% of its components, so not ideal but not terrible either. And the Overload Reduction column means that this program reduces fidelity by 10% if it is included in addition to one other program. It is the weight of extra duties and responsibilities.

(LEADERS) MODULE 2 ACTIVITY

Calculating the Cost of Implementation Overload

Let's calculate what each program is capable of doing for staff on its own. Pretend you are at a clinic with 1000 patients. Use this equation to calculate overall effectiveness of each program (i.e., the number of patients ultimately served given reach, effectiveness, and fidelity). Feel free to have a scratch pad and calculator next to you while you work.

Patients Served = 1000 x Program Reach x Effectiveness x Fidelity

1) **Program A** =

2) **Program B** =

3) **Program C** =

4) **Program D** =

Now, calculate the effectiveness of program A (well-being) if professionals are also trying to implement program B, program B + C, and then program B + C + D. Use this formula

Patients Served = 1000 * Program Reach * Effectiveness * (.6-.1*# of programs)fidelity

1) **Program A** =

2) **Program B** =

3) **Program C** =

4) **Program D** =

What you will find is, as the number of programs increase, the ability to implement program A, the staff well-being program, with fidelity (i.e., with all components implemented well) drops, which has "downriver" effects on the number of patients served. This is the reality of an overloaded system; although we may start off with a program or effort with the intent of reaching 1,000 patients, our reality is often much lower as competing demands, burnout, and general effectiveness of the program decrease.