



Six Sigma Process Improvement of St. Pete's Home Health and Hospice Program



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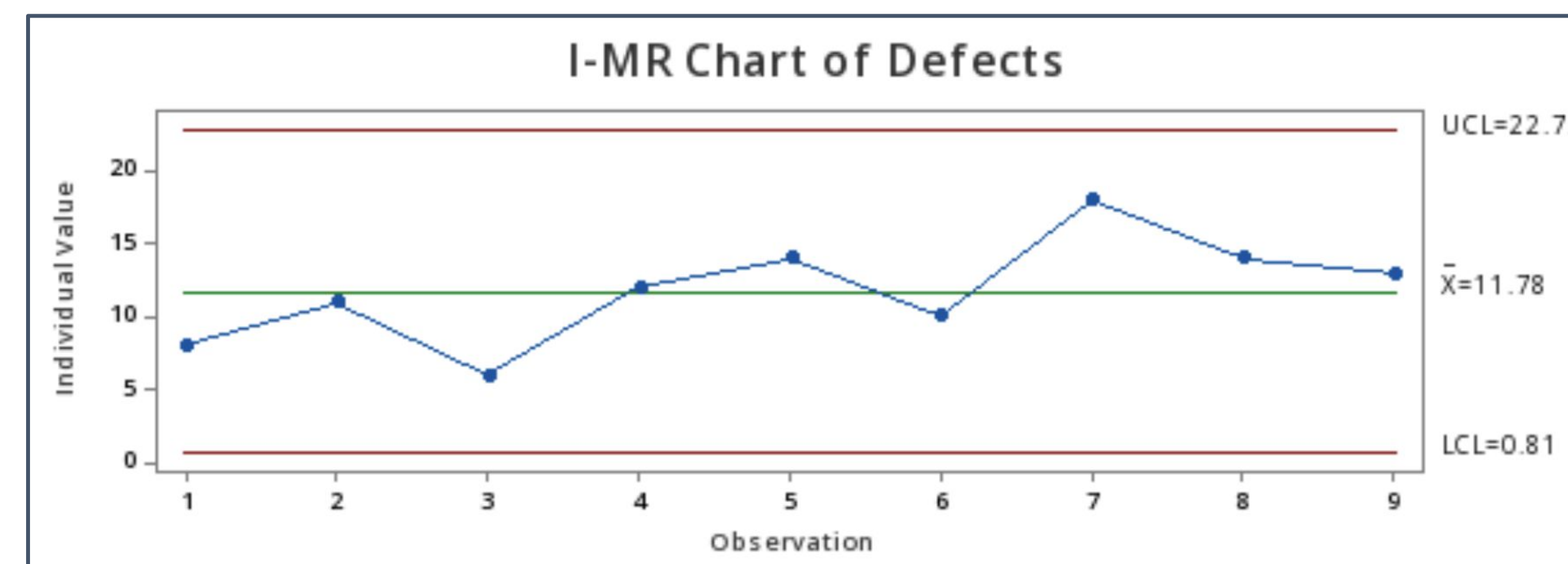
Advised by Dr. Adel Dimian, Business Department

Our Goal

Improve preventable emergency room (ER) admissions, which inform Medicare payments to Home Health and result in significant cost and loss of Medicare revenue for St. Peter's.

Measure

KJ Question:
What are the issues that prevent us from reducing ER visits for our Home Health patients?



St. Peter's created an internal survey to establish how much the office staff knows about Home Health.

This included some answers that are purposely misleading, labelled here as incorrect.

What services do you believe Home Health provides to patients at home?

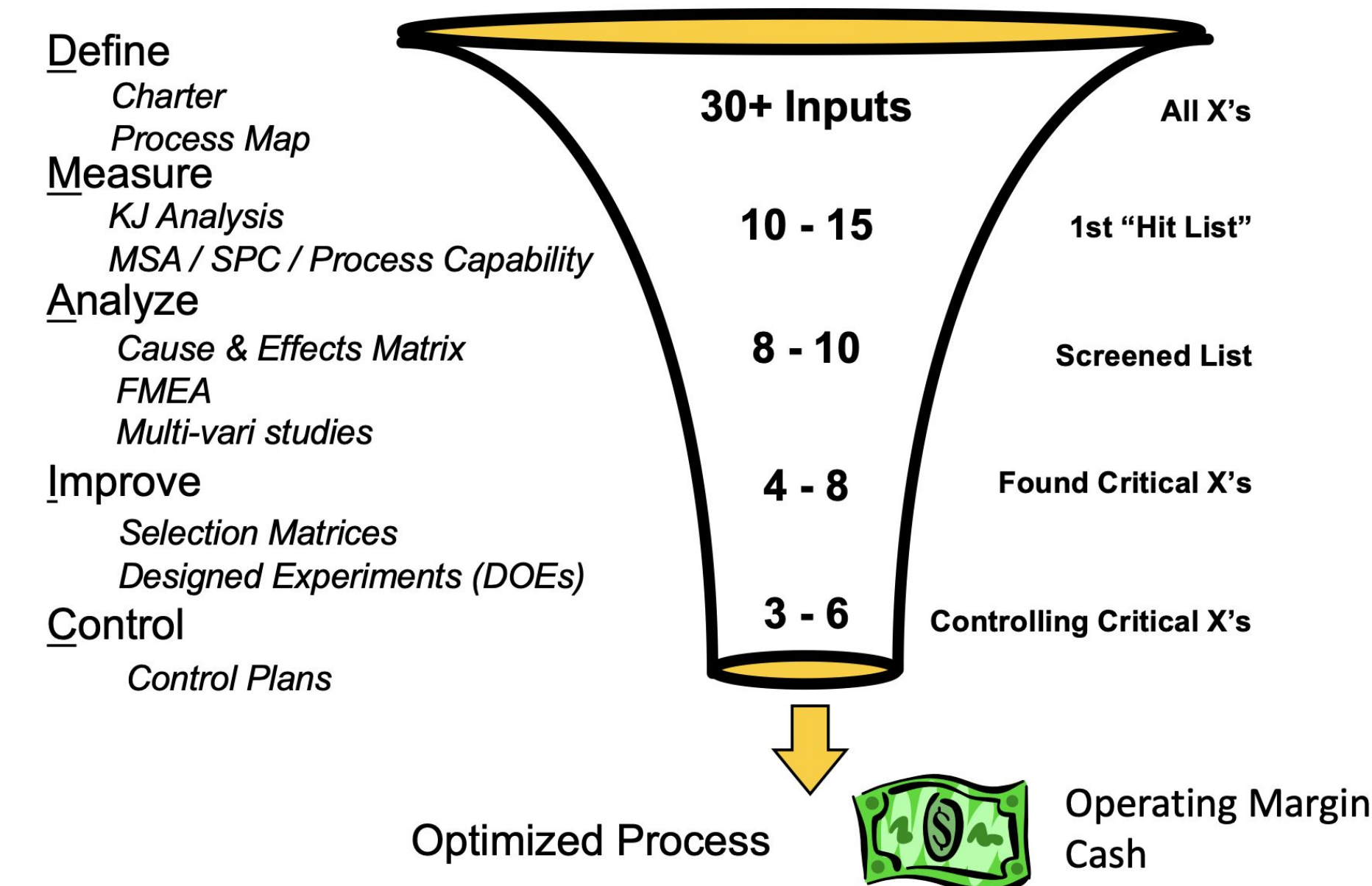
- Strengthening, balance and gait training
- ADL and IADL support
- Transportation to appointments
- Showering and bathing assistance
- Wound care, lab collection, well checks and medical diagnosis education
- Assistance picking up groceries and medications

Incorrect!

Incorrect!

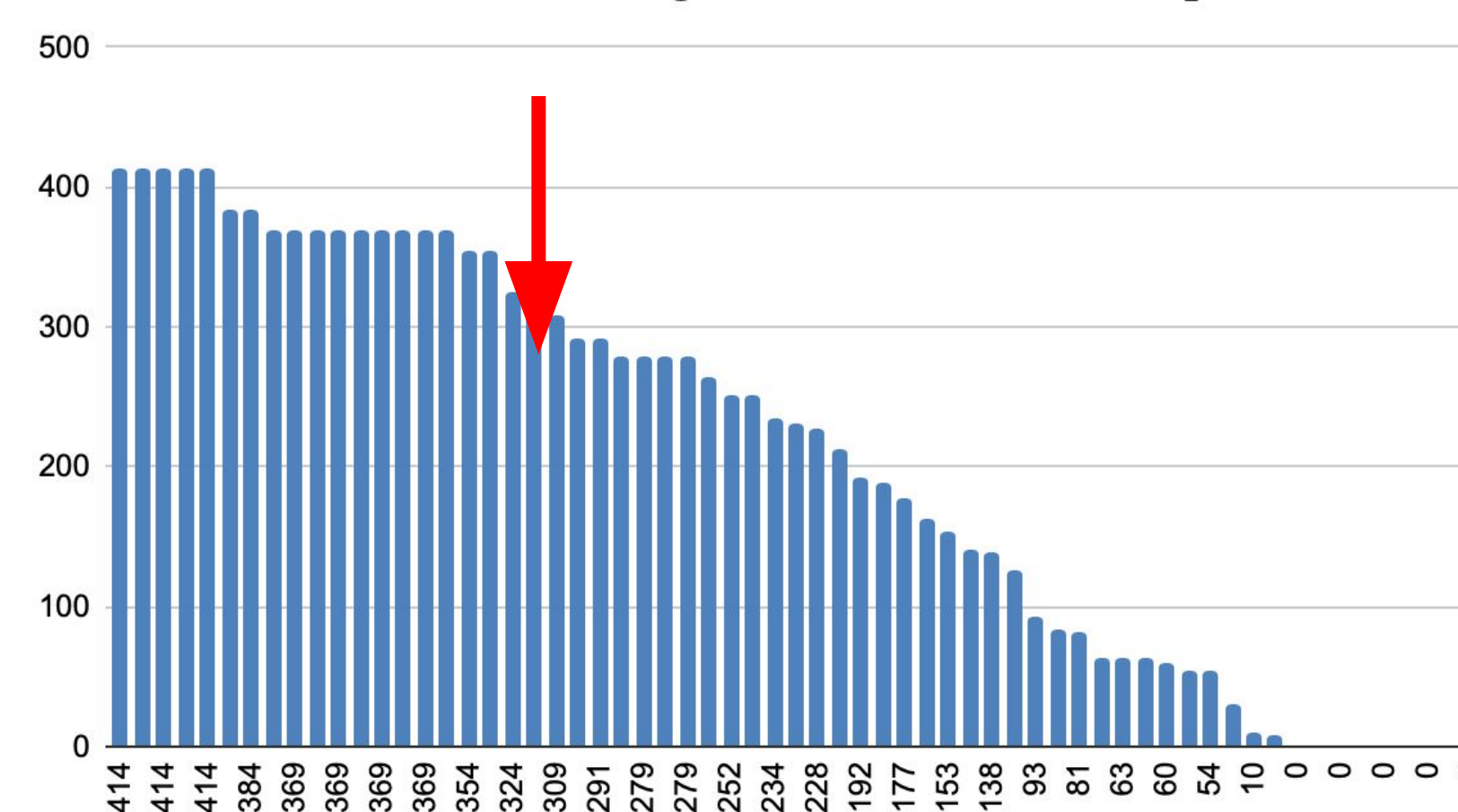
The Six Sigma Process

$$Y \text{ (Key Business Process Output)} = f(x_1, x_2, \dots, x_k)$$

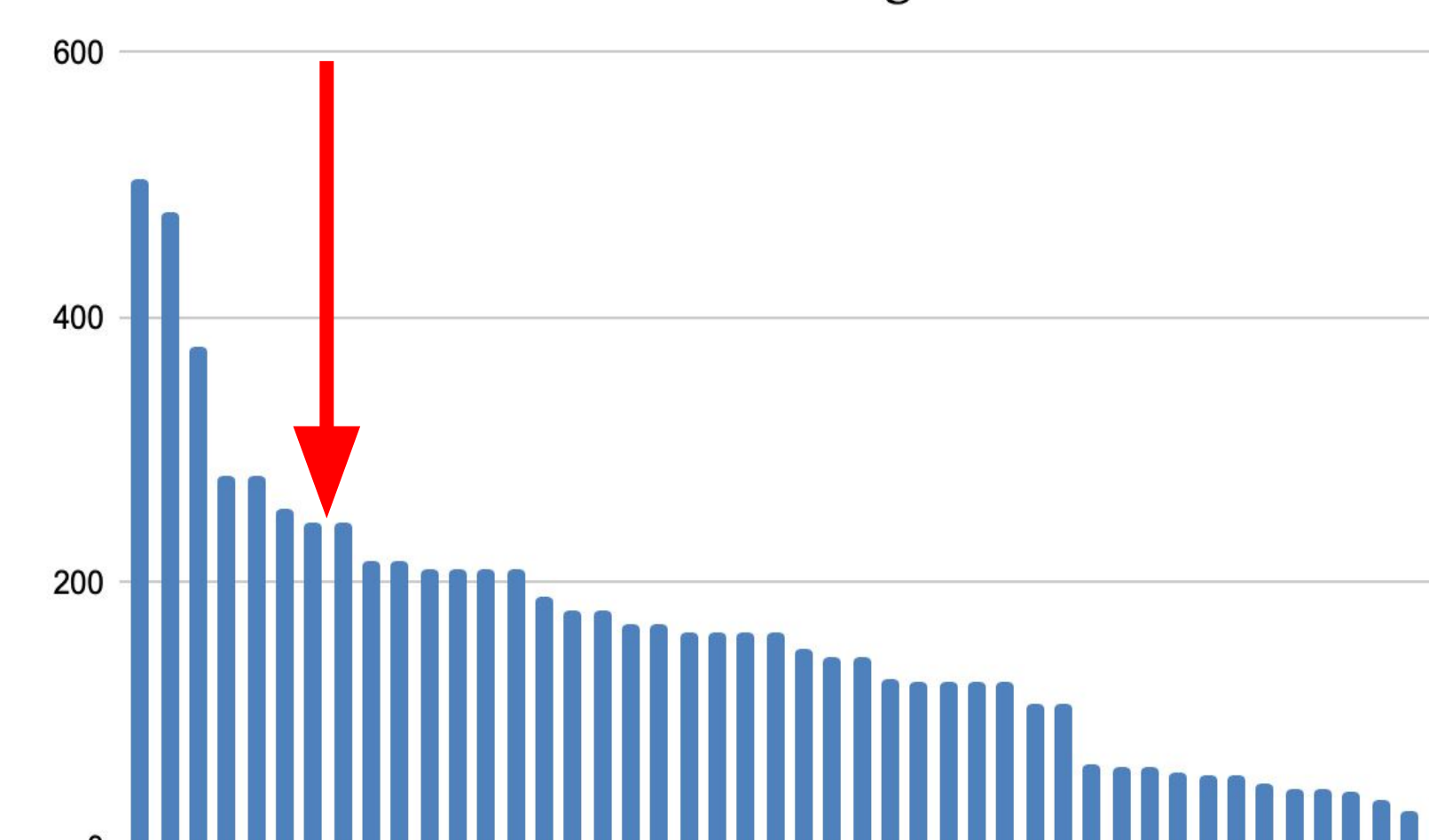


A doctor would recommend to not ride your bike because you could break your arm, but are you still going to ride your bike. Yes. Uncontrollable choices of patients is a big cause to unnecessary ER visits.

Cause & Effect (C&E) Ratings for KJ and Process Map Variables



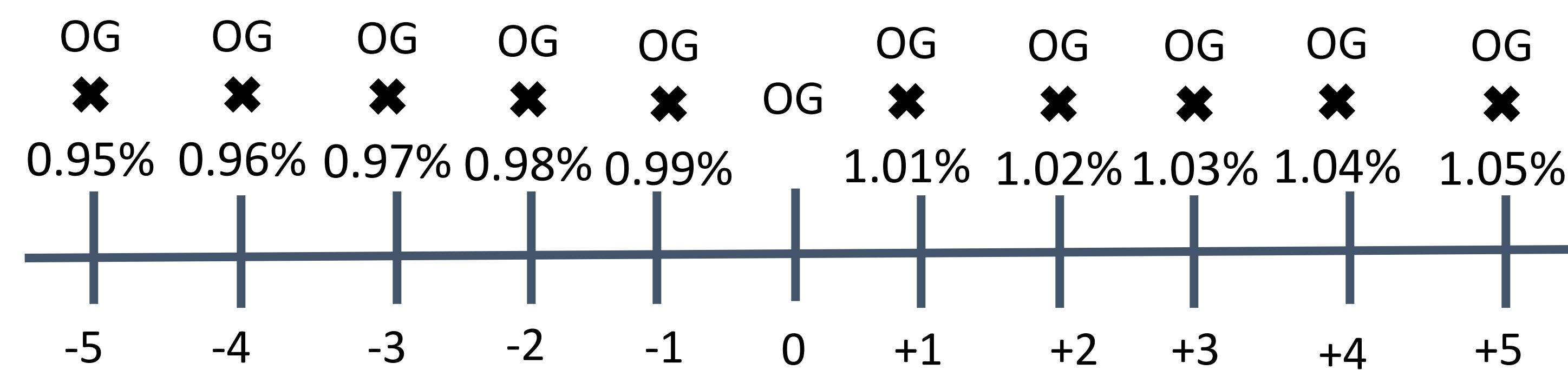
FMEA Ratings



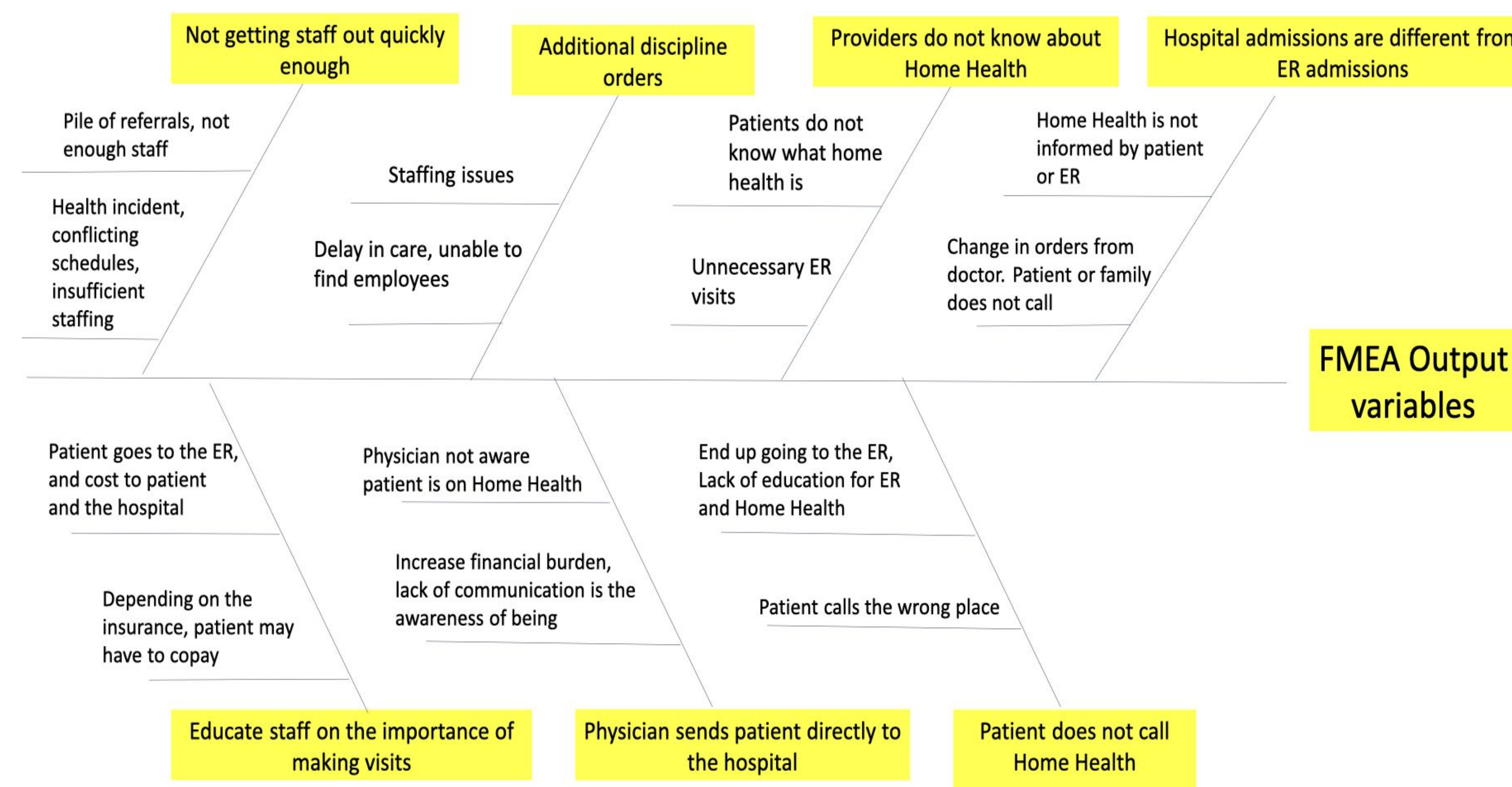
Define

Total Performance Scores (TPS):

Original payment ✖ percent of new level.



Analyze



From our Failure Modes and Effects Analysis (FMEA) output variables we have seven main variables that add to the cause of unnecessary ER visits. In addition each variable has a potential failure mode for the first line, then potential causes and effects for the second line.

Chi-Square Test

	Chi-Square	DF	P-Value
Pearson	0.020	1	0.886
Likelihood Ratio	0.020	1	0.886

Improve

Process Mapping example:

