HeartFlow Data Analyst Exercise

Meaning of Data

Unique Id: It is the unique identifier for each patient's submitted CT scans

Case State: It includes completed and returned, completed means cases get reviewed by analysts and sent to customers; returned means the case cannot be processed due to quality issues.

Site: The unique identifier for the hospital that submitted the unique id.

CTQ: the CT quality of each unique id including Borderline, OK, Excellent.

Disease Burden: The amount of disease in the case including Low, Moderate, High.

*The CTQ and Disease Burden are qualitative scores given by analysts visually.

Returned Reason: It is specific quality issues when unique Id gets returned, including Motion, Noise, S-Misalignment, G Low Contrast, A-Anatomy, Bypass, M-Stents, C-Myocardium, C-Coronaries, IM-Hardware, Unsupported RA, GLC, Misalignment, NCP and Other.

IQ Score: the score is in the range from 0 - 1, 0 represents poor image quality and 1 represents perfect image quality.

Questions to Answer

1. Are there any trends in why cases are being returned?

2. What steps did you take to set up the analysis?

3. How does the CTQ/Disease Burden assessment relate to the IQ scores?

4. Present a summary of interesting findings.

How to Submit Exercise

When submitting your exercise, please include the following in an email to dasmith@heartflow.com

1. A slide deck (can be PDF) that includes answers to the questions and the findings.
2. Readable version of the actual sheets/code you used to generate the analysis.