Harnessing Big Data to Assess Job Fit Across Roles

1 Establish Baseline

- Organization selects outcome it wants to improve on *(i.e. patient satisfaction, turnover rate)*
- Arena pulls organization's historic employee and outcome data to create an algorithm.

2 Screen Candidates

- Candidates take a 20-minute online assessment.
- Arena collects candidate's answers and data related to their testing behavior *(i.e. speed, tendency to skip questions)*

3 Predict Performance

- Arena runs candidates' data through algorithm and predicts their impact on the pre-selected outcome
- Arena correlates candidate's data with employee data for all jobs and determines candidate's job fit for other roles

Source: Arena, Baltimore, MD; HR Advancement Center interviews and analysis

Technology in Brief: Arena

- "Big data" analytics engine founded in 2009 in Baltimore, Maryland
- Deployed in over 400 health care facilities, processing 4 million job applications annually
- Candidates complete a 20 minute automated fit screen, and Arena collects data both related to the substance of candidate answers and behaviors analyzed while completing the screen (i.e. giving up on hard question, typing longer answers, delays before responding, tendency to make bold statements)
- Unique algorithms predict a candidate's potential impact on a metric of the client's choosing (i.e. patient satisfaction or safety)
- Across 94 facilities with sufficient experience for analysis, Arena analytics reduced overall turnover by an average of 38%, reduced first year turnover by an average of 75% (median reduction of 22%)

Data-Driven Alternate Suggestions for Runners Up

7,500 employee health system

	Home Care RN	Emergency Department RN	Maternal Child Department RN
Initial Applicants	8	18	20
Applicants Recommended by Arena Based on Potential to Succeed	215	198	192