Welcome to an exploration of our strategic roadmap for elevating employee wellbeing and health at BSR. This memo offers BSR management a concise breakdown of three key focal points we've pinpointed through rigorous analysis. Our initial investigation sheds light on a noteworthy gender pay disparity among Director and Manager levels. Our second examination highlights an unsuccessful tobacco cessation program that emphasizes a revamp of program design to foster higher participation rate. Lastly, we recommend investing in the BMI fitness intervention as an effective approach to reduce health care costs and increase employee performance.

**Highlight 1: Is there a gender wage gap at BSR?** Yes, we observed the existence of gender wage gap by analyzing a linear regression model with tenure (years) as the independent variable and salary as the dependent variable across gender. At the Junior employee level, the salary disparity between genders is relatively minimal, with women merely earning $159 more than their male counterparts, indicating a promising equitable baseline. Remarkably, parity also prevails at the Manager level, where both female ($80k/ year) and male ($79.9k/ year) initiate their tenure on similar salary scales. This level, male employees outpace female counterparts by 60%, showcasing a concerning trend. Upon reaching the Director level, the gender wage gap widens significantly. Notably, male Directors commence with a starting salary of $250k, whereas female counterparts start at $188k, revealing a substantial 74% variance as tenure increases.

**Highlight 2: Which employees was the smoking intervention most effective. Smoking cessation program needs greater participation rate**. Out of 249 employees who opted to participate in the smoking cessation program, only 28 quit smoking (number of cigarettes smoked per day = 0), a success rate of 11% comprising a mix of 21 Junior employees, 1 Director, and 6 Managers who quit smoking. While only 11% of the workforce quit, the overall reduction in the number of cigarettes smoked was 32% across job levels. We also note that the 249 participants reported higher scores on the job engagement and overall job satisfaction, measured by comparing pre (2.6) and post (4.6) satisfaction surveys (range from 1- 5). Overall, smoking levels were reduced, and employees reported higher satisfaction scores. There is no subset for which this intervention was most effective. With average scores increasing in engagement questions and average number of cigarettes smoked decreasing across all employee and job levels, this intervention was generally effective. However, with only 11% quitting completely, BSR should consider other strategies to encourage people to quit completely. We also note the total cost for this program is $1.5M ($6.4k \* 249). Total savings are $162k ($5.8k \*249 employees).Top of Form

**Highlight 3: Are fitness interventions more effective for BMI or daily exercise levels?** The “Get Fit” program had a successful participation rate (67% or 999 employees). We observed participation was evenly split between females and male participation. Across participants, daily exercise time increased by 3.2 mins (or 15.6%) and BMI values dropped from 2.03 BMI points (or 7.9%). Based on research supporting BMI levels at 25, we note that 177 participants improved BMI levels to the healthy level. This translates to a savings cost of $696k annually, as employer sponsored health cost would have reduced from $8.1k to $3.8k. Contrastingly, we established that success for daily exercise levels meant a minimum of 30 minutes daily to achieve optimum health benefits. We note that only 74 employees increased daily exercise to this level, translating to $384k cost savings ($406k savings in diabetes/ cholesterol related health coverage - $22k in program cost). We recommend BSR investing in the BMI fitness initiative which resulted in a significant health care costs reduction and increased employee performance.Top of Form

Appendix of Calculated field name:

1. Calculated field name*:* Number of Employees
   1. Function: COUNTD([Employee ID])
   2. How: Used a Count Distinct function to count the # of unique employee IDs,
   3. Why: This field computes the number of unique employees to plot on a scatter plot for Pre and Post initiatives to see the trends and linear regression relationship
2. Calculated field name*:* Unique ID
   1. Function: [Office Location]+[Gender]+[Children (Y/N)]+[Remote as of 1/1/2022]+[Employee Job Family]+[Employee Level]
   2. How: Combined string values into one field and created bar chart across all unique values as measures to identify certain anomalies within fields
   3. Why: Allows us to break employees into granular sub-groups for data exploration
3. Calculated field name: **Post** BMI Health status (>25)
   1. Function: If [Post: BMI] <= 25 THEN "Healthy"

ELSE "Unhealthy"

END

* 1. How: Used an IF / Then statement to establish Attributes for comparing Pre and Post Data for BMI and exercise levels
  2. Why: This would allow us to determine the effectiveness of Get Fit program between two initiatives

1. Calculated field name: **Pre** BMI Health status <25)
   1. Function: If [Pre BMI Health status (<=25) THEN "Healthy"

ELSE "Unhealthy"

END

* 1. How: Used an IF / Then statement to establish Attributes for comparing Pre and Post Data for BMI and exercise levels
  2. Why: This would allow us to determine the effectiveness of Get Fit program between two initiatives

1. Calculated 2 separate field name: Difference – BMI and Difference- Exercise
   1. Function 1: AVG([Post: BMI])-AVG([Pre: BMI])
   2. Function 2: AVG([Post: Exercise])-AVG([Pre: Exercise])
   3. How: Used mathematical calculation to compute the average
   4. Why: To be able to quantify the benefit cost for impacted employees within a subset of the workforce population who were “Unhealthy” Pre period and became “Healthy” post- period
2. Calculated field name: Exercise cost per EE
   1. Function: If [Exercise intervention (Y=1, N=0)]=1 THEN 1\*300

ELSE 0

END

* 1. How: Used IF statement to compute the cost of health program per employee if they opted in to the fitness program
  2. Why: This would enable an analysis of cost vs. savings between two fitness programs (BMI or daily exercise) and determine which is most advantageous for BSR