## **Appendix: Programmatic Success Dashboard Formulas**

The tables below are a list of the formulas used to display the charts and metrics on the Programmatic Success Dashboard. The list of fields is directly from the RETAIN *Quarterly Progress Report* Appendix A for Phase 2. Please refer to the Appendix A data dictionary for a complete list of fields, their definitions, and defined field values.

| Table 1: Participant Demographics Programmatic Success Dashboard Formu | ılas |
|--|------|
|--|------|

| Dashboard widget    | Type of graphic | QPR data<br>field(s) | Formula <sup>i</sup>  |
|---------------------|-----------------|----------------------|---|
| Age of Participants | Chart           | RTN03<br>RTN69       | CASE<br>WHEN RTN03>=18 and RTN03<=29 THEN "18–29"<br>WHEN RTN03>=30 and RTN03<=39 THEN "30–39"<br>WHEN RTN03>=40 and RTN03<=49 THEN "40–49"<br>WHEN RTN03>=50 and RTN03<=59 THEN "50–59"<br>WHEN RTN03>=60 and RTN03<=69 THEN "60–69"<br>WHEN RTN03>=70 THEN "70+"<br>ELSE "Other"<br>END<br>CASE<br>WHEN STARTS_WITH(RTN69, "1") THEN 1<br>END<br>CASE<br>WHEN STARTS_WITH(RTN69, "2") THEN 2<br>END |

<sup>&</sup>lt;sup>i</sup> All charts use either a COUNT() of number of participants or COUNT() of percentage of participants after the group by statements

| Dashboard widget                | Type of graphic | QPR data<br>field(s)  | Formula <sup>i</sup>  |
|---------------------------------|-----------------|---|---|
| Participant Education           | Chart           | RTN08   | CASE<br>WHEN CONTAINS_TEXT(RTN08, "1") THEN "Less than high school<br>degree"<br>WHEN CONTAINS_TEXT(RTN08, "2") THEN "High school degree<br>or equivalent"<br>WHEN CONTAINS_TEXT(RTN08, "3") THEN "Occupational or 2-<br>year college degree"<br>WHEN CONTAINS_TEXT(RTN08, "4") THEN "4-year college degree<br>(bachelor's)"<br>WHEN CONTAINS_TEXT(RTN08, "4") THEN "4-year college degree<br>(bachelor's)"<br>WHEN CONTAINS_TEXT(RTN08, "4") THEN "4-year college degree<br>(bachelor's)"<br>WHEN CONTAINS_TEXT(RTN08, "5") THEN "Postgraduate<br>degree"<br>END |
| Sex and Race of<br>Participants | Chart           | RTN05<br>RTN06<br>RTN07-1<br>RTN07-2<br>RTN07-3<br>RTN07-4<br>RTN07-5 | CASE<br>WHEN RTN06 = 1 THEN "Hispanic"<br>When RTN07-1 = 1 THEN "White"<br>When RTN07-2 = 1 THEN "Black"<br>WHEN RTN07-3 = 1 THEN "American Indian or Alaska Native"<br>WHEN RTN07-4 = 1 THEN "Asian"<br>WHEN RTN07-5 = 1 THEN "Hawaiian or Pacific Islander"<br>END<br>CASE<br>WHEN STARTS_WITH(RTN05, 1) THEN "Male"<br>END,  |

| Dashboard widget                               | Type of graphic | QPR data<br>field(s) | Formula <sup>i</sup>  |
|--|-----------------|----------------------|---|
| Sex and Race of<br>Participants<br>(continued) |                 |                      | CASE<br>WHEN STARTS_WITH(RTN05, 2) THEN "Female"<br>END   |
| Industry Summary                               | Chart           | RTN28                | CASE<br>WHEN RTN28=1 THEN "Agriculture or mining"<br>WHEN RTN28=2 THEN "Construction or utilities"<br>WHEN RTN28=3 THEN "Manufacturing"<br>WHEN RTN28=3 THEN "Manufacturing"<br>WHEN RTN28=4 THEN "Retail trade, wholesale trade, or<br>transportation"<br>WHEN RTN28=5 THEN "Information"<br>WHEN RTN28=5 THEN "Information"<br>WHEN RTN28=6 THEN "Finance or real estate"<br>WHEN RTN28=6 THEN "Finance or real estate"<br>WHEN RTN28=7 THEN "Professional, management, or<br>administrative services"<br>WHEN RTN28=8 THEN "Education or health care"<br>WHEN RTN28=9 THEN "Accommodation and food services or<br>arts and entertainment"<br>WHEN RTN28=10 THEN "Other services"<br>WHEN RTN28=11 THEN "Public administration" |
| Total Participants                             | Metric          | RTN01                | COUNT(RTN01)  |
| Average Age of<br>Participants                 | Metric          | RTN03                | AVG(RTN03)  |

| Dashboard widget   | Type of graphic | QPR data<br>field(s) | Formula  |
|--|-----------------|----------------------|--|
| Top 10 Illnesses or<br>Injuries  | Chart           | RTN22                | COUNT(RTN22)   |
| Percentage of<br>Participants Enrolled<br>by # of Weeks After<br>Injury or Illness | Chart           | RTN20<br>RTN24       | CASE<br>WHEN DATE_DIFF(RTN20, RTN24) > 0 AND DATE_DIFF(RTN20,<br>RTN24) <=14 THEN "2 Weeks"<br>WHEN DATE_DIFF(RTN20, RTN24) > 14 AND DATE_DIFF(RTN20,<br>RTN24) <= 28 THEN "4 Weeks"<br>WHEN DATE_DIFF(RTN20, RTN24) > 28 AND DATE_DIFF(RTN20,<br>RTN24) <= 42 THEN "6 Weeks"<br>WHEN DATE_DIFF(RTN20, RTN24) > 42 AND DATE_DIFF(RTN20,<br>RTN24) <= 56 THEN "8 Weeks"<br>WHEN DATE_DIFF(RTN20, RTN24) > 56 AND DATE_DIFF(RTN20,<br>RTN24) <= 70 THEN "10 Weeks"<br>WHEN DATE_DIFF(RTN20, RTN24) > 56 AND DATE_DIFF(RTN20,<br>RTN24) <= 70 THEN "10 Weeks"<br>WHEN DATE_DIFF(RTN20, RTN24) > 70 AND DATE_DIFF(RTN20,<br>RTN24) <=84 THEN "12 Weeks"<br>END |
| Median Days in<br>RETAIN Program   | Metric          | RTN70<br>RTN20       | MED(DATE_DIFF(RTN70, RTN20))   |
| Median Days Between<br>Enrollment and RTW<br>Plan                                  | Metric          | RTN42<br>RTN20       | MED(DATE_DIFF(RTN42, RTN20))   |
| Median Days Between<br>RTW Plan and Exit   | Metric          | RTN70<br>RTN42       | MED(DATE_DIFF(RTN70, RTN42))   |

## Table 2: Program Metrics Programmatic Success Dashboard Formulas

| Dashboard widget                               | Type of graphic | QPR data<br>field(s) | Formula    |
|--|-----------------|----------------------|------------|
| Median Number of<br>Employer Touchpoints       | Metric          | RTN35                | MED(RTN35) |
| Median Number of<br>HCP Touchpoints            | Metric          | RTN36                | MED(RTN36) |
| Median Number of<br>Coordinator<br>Touchpoints | Metric          | RTN34                | MED(RTN34) |

## Table 3: Program Metrics (Part 2) Programmatic Success Dashboard Formulas

| Dashboard widget  | Type of graphic | QPR data<br>field(s)    | Formula  |
|---|-----------------|-------------------------|--|
| Number of<br>Participants who<br>Interacted with<br>RETAIN Stakeholders | Chart           | RTN38<br>RTN39<br>RTN40 | CASE<br>WHEN RTN38 = 1 THEN "Health care provider"<br>WHEN RTN39 = 1 THEN "Employer"<br>WHEN RTN40 = 1 THEN "Another party"<br>END   |
| Referral Services   | Chart           | RTN30                   | CASE<br>WHEN RTN30 = 1 THEN "Community-based organization"<br>WHEN RTN30 = 2 THEN "Employer (RETAIN affiliated)"<br>WHEN RTN30 = 3 THEN "Employer (not RETAIN affiliated)"<br>WHEN RTN30 = 4 THEN "Health care provider (RETAIN affiliated)"<br>WHEN RTN30 = 5 THEN "Health care provider (not RETAIN<br>affiliated)"<br>WHEN RTN30 = 6 THEN "Health care" |

| Dashboard widget                           | Type of graphic | QPR data<br>field(s)                               | Formula  |
|--|-----------------|--|--|
| Referral Services<br>(continued)           |                 |  | WHEN RTN30 = 7 THEN "Workforce system"<br>WHEN RTN30 = 8 THEN "Self-referral"<br>WHEN RTN30 = 9 THEN "Social media or press"<br>WHEN RTN30 = 10 THEN "Workforce system professional"<br>WHEN RTN30 = 11 THEN "Vocational rehabilitation provider"<br>WHEN RTN30 = 12 THEN "Other"<br>END   |
| Program Services and<br>Referrals          | Chart           | RTN54<br>RTN55<br>RTN56<br>RTN57<br>RTN58<br>RTN59 | CASE<br>WHEN RTN54 = 1 THEN "Job search services"<br>WHEN RTN55 = 1 THEN "Training services"<br>WHEN RTN56 = 1 THEN "Case management services"<br>WHEN RTN57 = 1 THEN "On-site job analysis"<br>WHEN RTN58 = 1 THEN "On-site job analysis"<br>WHEN RTN58 = 1 THEN "Ergonomic assessment"<br>WHEN RTN59 = 1 THEN "Transitional work opportunity"<br>END |
| Number Referred for<br>non-RETAIN Services | Metric          | RTN54<br>RTN55<br>RTN56<br>RTN57<br>RTN58<br>RTN59 | CASE<br>WHEN RTN54 = 2 THEN 1<br>WHEN RTN55 = 2 THEN 1<br>WHEN RTN56 = 2 THEN 1<br>WHEN RTN57 = 2 THEN 1<br>WHEN RTN58 = 2 THEN 1<br>WHEN RTN59 = 2 THEN 1<br>END  |

| Dashboard widget                           | Type of graphic | QPR data<br>field(s)             | Formula   |
|--|-----------------|----------------------------------|---|
| Number with<br>Workplace<br>Accommodations | Metric          | RTN48<br>RTN49<br>RTN50<br>RTN51 | CASE<br>WHEN RTN48 = 1 THEN 1<br>WHEN RTN49 = 1 THEN 1<br>WHEN RTN50 = 1 THEN 1<br>WHEN RTN51 = 1 THEN 1<br>END |

## Table 4: Exited Participants Programmatic Success Dashboard Formulas

| Dashboard widget               | Type of graphic | QPR data<br>field(s)                               | Formula  |
|--------------------------------|-----------------|--|--|
| Employment<br>Outcomes at Exit | Chart           | RTN48<br>RTN49<br>RTN50<br>RTN51<br>RTN52<br>RTN68 | CASE<br>WHEN (RTN48 = 1 OR RTN49 = 1 OR RTN50 = 1 OR RTN51 = 1 OR<br>RTN52 = 1) AND (RTN68 >= 1 AND RTN68 <= 3) THEN "Working<br>With Accommodation"<br>WHEN (RTN48 = 0 OR RTN49 = 0 OR RTN50 = 0 OR RTN51 = 0 OR<br>RTN52 = 0) AND (RTN68 >= 1 AND RTN68 <= 3) THEN "Working<br>Without Accommodation"<br>WHEN RTN68 = 0 THEN "Did Not Return To Work"<br>END |

| Dashboard widget   | Type of graphic | QPR data<br>field(s)   | Formula   |
|--|-----------------|--|---|
| Percentage of<br>Participants Enrolled<br>by # of Weeks after<br>Injury or Illness | Chart           | RTN20<br>RTN24<br>RTN68  | CASE<br>WHEN DATE_DIFF(RTN20, RTN24) > 0 AND DATE_DIFF(RTN20,<br>RTN24) <=14 THEN "2 Weeks"<br>WHEN DATE_DIFF(RTN20, RTN24) > 14 AND DATE_DIFF(RTN20,<br>RTN24) <= 28 THEN "4 Weeks"<br>WHEN DATE_DIFF(RTN20, RTN24) > 28 AND DATE_DIFF(RTN20,<br>RTN24) <= 42 THEN "6 Weeks"<br>WHEN DATE_DIFF(RTN20, RTN24) > 42 AND DATE_DIFF(RTN20,<br>RTN24) <= 56 THEN "8 Weeks"<br>WHEN DATE_DIFF(RTN20, RTN24) > 56 AND DATE_DIFF(RTN20,<br>RTN24) <= 70 THEN "10 Weeks"<br>WHEN DATE_DIFF(RTN20, RTN24) > 56 AND DATE_DIFF(RTN20,<br>RTN24) <= 70 THEN "10 Weeks"<br>WHEN DATE_DIFF(RTN20, RTN24) > 70 AND DATE_DIFF(RTN20,<br>RTN24) <= 84 THEN "12 Weeks"<br>END<br>CASE<br>WHEN RTN68 >= 1 AND RTN68 <= 3 THEN "RTW"<br>WHEN RTN68 = 0 then "No RTW"<br>END |
| Median Days in Retain Metric<br>Program  | Metric          | Metric RTN20<br>RTN70<br>RTN68   | Returned to Work Formula<br>DATE_DIFF(RTN70, RTN20), FILTER(RTN69 =2 & (RTN68 >= 1 &<br>RTN68 <=3 )   |
|  | RTN69           | Exited w/o Return to Work Formula<br>DATE_DIFF(RTN70, RTN20), FILTER(RTN69 =2 & RTN68 = 0) |   |

| Dashboard widget                                  | Type of graphic | QPR data<br>field(s)          | Formula   |
|---|-----------------|-------------------------------|---|
| Median Days Between<br>Enrollment and RTW<br>Plan | Metric          | RTN20<br>RTN42<br>RTN68       | Returned to Work Formula<br>DATE_DIFF(RTN42, RTN20), FILTER(RTN69 =2 & (RTN68 >= 1 &<br>RTN68 <=3 ) |
|   |                 | RTN69                         | Exited w/o Return to Work Formula<br>DATE_DIFF(RTN42, RTN20), FILTER(RTN69 =2 & RTN68 = 0)          |
| Median Days Between M<br>RTW Plan and Exit        | Metric          | RTN42<br>RTN68<br>RTN69       | Returned to Work Formula<br>DATE_DIFF(RTN70, RTN42), FILTER(RTN69 =2 & (RTN68 >= 1 &<br>RTN68 <=3 ) |
|   |                 | RTN70                         | Exited w/o Return to Work Formula<br>DATE_DIFF(RTN70, RTN42), FILTER(RTN69 =2 & RTN68 = 0)          |
| Median Number of<br>Employer Touchpoints          | Metric          | etric RTN35<br>RTN68<br>RTN69 | Returned to Work Formula<br>MED(RTN35), FILTER(RTN69 =2 & (RTN68 >= 1 & RTN68 <=3 )                 |
|   |                 |                               | Exited w/o Return to Work Formula<br>MED(RTN35), FILTER(RTN69 =2 & RTN68 = 0)                       |
| Median Number of HCP Touchpoints                  | Metric          | RTN36<br>RTN68<br>RTN69       | Returned to Work Formula<br>MED(RTN36), FILTER(RTN69 =2 & (RTN68 >= 1 & RTN68 <=3 )                 |
|   |                 |                               | Exited w/o Return to Work Formula<br>MED(RTN36), FILTER(RTN69 =2 & RTN68 = 0)                       |
| Median Number of Me<br>Participant<br>Touchpoints | Metric          | RTN34<br>RTN68                | Returned to Work Formula<br>MED(RTN34), FILTER(RTN69 = 2 & (RTN68 >= 1 & RTN68 <=3 )                |
|   | RTM             | RTN69                         | Exited w/o Return to Work Formula<br>MED(RTN34), FILTER(RTN69 = 2 & RTN68 = 0)                      |

| Dashboard widget   | Type of graphic | QPR data<br>field(s)    | Formula  |
|--|-----------------|-------------------------|--|
| Number Referred to<br>Other Programs After<br>RETAIN     | Metric          | RTN68<br>RTN69<br>RTN71 | CASE<br>WHEN RTN71 = 1 THEN 1<br>END<br>FILTER(RTN69 = 2 & RTN68 = 0)    |
| Number Not Referred<br>to Other Programs<br>After RETAIN | Metric          | RTN68<br>RTN69<br>RTN71 | CASE<br>WHEN RTN71 = 2<br>THEN 1<br>END<br>FILTER(RTN69 = 2 & RTN68 = 0) |