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Workforce Analytics Resources

Child Welfare Quality Improvement Center for
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Workforce Metrics

Quality Improvement Center for Workforce Development

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Workforce Metrics

Calculating and tracking workforce metrics is a valuable way to assess workforce needs and examine workforce-related processes, interventions, and outcomes. This resource includes over 90 metrics related to recruitment and selection, education, work hours, work arrangements, caseload capacity, supervision, career development, performance, turnover and tenure, and costs. Note that these metrics are not universal, and many other variations exist elsewhere. These have been selected or developed based on their applicability to the child welfare workforce.

Recruitment and Selection

Quantity Metrics

Average number of applicants per opening	Total number of applicants across openings divided by the number of openings
Candidate dropout rate (per stage of hiring process)	For each stage of the hiring process, total number of candidate that choose to drop out of the hiring process divided by the number of candidates in the hiring process, multiplied by 100
Yield ratio (per stage of hiring process)	For each stage of the hiring process, total number of candidates that pass the stage divided by the total number of candidates who entered the stage, multiplied by 100
Selection ratio	Total number of candidates hired divided by the total number of candidates
Source of application	Total number of applicants recruited through a certain source ¹ divided by the total number of applicants, multiplied by 100
Source of hire	Total number of hires recruited through a certain source divided by the total number of hires, multiplied by 100
Internal hire rate	Total number of internal hires in a period divided by the average headcount for the period, multiplied by 100
External hire rate	Total number of external hires in a period divided by the average headcount for the period, multiplied by 100
Rehire rate	Total number of rehires in a period divided by the average headcount for the period, multiplied by 100

Time Metrics

Time in process (per stage of hiring process)	For each stage of the hiring process, total number of days for a candidate to complete each stage of hiring process
Average time in process (per stage of hiring process)	Total time in process across candidates divided by the number of candidates in process
Time to accept	Total number of days between when a job was opened and an offer is accepted
Average time to accept	Total time to accept across candidates divided by the number of offers accepted, multiplied by 100
Time to fill	Total number of days between when a job was opened and candidate passes all post-offer hurdles such as a background check
Average time to fill	Total time to fill across job openings divided by the number of openings filled, multiplied by 100
Time to start	Total number of days between when a job was opened and the new hire starts working
Average time to start	Total time to start across candidates divided by the number of candidates hired, multiplied by 100

Quality Metrics

Candidate net promoter score	Percent of promoters minus percent of detractors, as measured below: What is the likelihood that you would recommend this hiring experience to someone else? (1 to 10) 9-10 = Promoters, 7-8 = Passive, 0-6 = Detractors
Candidate satisfaction with overall and/or specific aspects of the hiring process	<ul style="list-style-type: none">○ Average rating or scale score○ Percent of candidates with high scores○ Percent of candidates with low scores
Quality of hire	Total number of hires meeting a certain standard divided by the total number of hires, multiplied by 100

Education

Education at hire	Total number of employees who had a certain level/type of degree at hire divided by the total number of employees hired, multiplied by 100 (could focus only on current employees or include leavers (for a certain time period), to get a more comprehensive view)
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Current education	Total number of employees who have a certain level/type of degree divided by the total number of employees, multiplied by 100
Educational advancement	Total number of employees who obtained a higher degree while employed divided by the total number of employees, multiplied by 100 (could focus only on current employees or include leavers (for a certain time period), to get a more comprehensive view)

Work Hours

Part-time employment rate	Total number of employees that are part time divided by the average headcount, multiplied by 100
Full-time employment rate	Total number of employees that are full time divided by the average headcount, multiplied by 100
Absenteeism rate	Total number of days missed across all employees divided by (total number of available workdays x average headcount), multiplied by 100
Average absence	Total number of days missed across all employees divided by the average headcount
Overtime rate	Total number of overtime hours worked across employees divided by the total number of regular hours worked across employees
Average overtime	Total number of overtime hours worked across employees divided by the average headcount
Overtime frequency	Total number of employees who worked overtime divided by the average headcount

Work Arrangements

Flexible schedule rate	Total number of employees that participate in a flexible schedule (or a specific type of flex schedule) divided by the average headcount, multiplied by 100
Telework rate	Total number of employees that telework divided by the average headcount, multiplied by 100

Caseload Capacity

Caseload capacity (only applicable to graduated)	Total number of employees who are at each level of caseload capacity divided by the average job headcount, multiplied by 100
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caseload assignment systems)	
Average time to caseload capacity (only applicable to graduated caseload assignment systems where advancement timing is discretionary)	Total number of days to advance from a minimum to “full” caseload (however defined by agency) across employees divided by the number of employees

Supervision

Supervisor churn percent	Total number of current employees who have had more than one supervisor in the last year divided by the current headcount
Supervisor-to-worker ratio	Supervisor headcount divided by supervisee headcount

Career Development

Average training hours per employee	Total number of training hours across all employees divided by the total number of employees
Promotion rate	Total number of promotions ² across all employees divided by the total headcount, multiplied by 100
Average time to promotion	Total time in position before promotion divided by the total number of promotion
Transfer rate	Total number of transfers ³ across all employees divided by the total headcount, multiplied by 100
Demotion rate	Total number of demotions ⁴ across all employees divided by the total headcount, multiplied by 100
Career path ratio	Total number of promotions divided by the total number of employees who moved to a new job within the agency

Performance

Training Performance Metrics

Knowledge test scores (individual)	<p>Knowledge or understanding of content trained, such as</p> <ul style="list-style-type: none"> ○ Legal concepts and practices ○ Case planning policy and practices
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Skills evaluation scores (individual)	Demonstration or application of skills trained, such as <ul style="list-style-type: none"> ○ Interviewing ○ Court report ○ Safety and risk decisions
Field observations (individual)	Observations of trainee performance by a trainer, mentor, or supervisor, such as <ul style="list-style-type: none"> ○ Conduct and performance while shadowing others ○ Interactions with other professionals ○ Interactions with children and families
Assignment completion (individual)	Number or percent of completed or missing assignments Number or percent of on-time or late assignments
Attendance (individual)	Number or percent of training courses/units attended or missed Number or percent of training courses/units for which trainee was tardy or left early
Professional Conduct (individual)	In-training observations about trainees' professional conduct, such as <ul style="list-style-type: none"> ○ Alertness, focus, and attentiveness ○ Respectfulness toward others ○ Response to feedback
Training completion rate (aggregate)	The number of employees who completed a given training or training program divided by the total number of employees who were expected to participate, multiplied by 100

Job Performance Metrics

Subjective Ratings	
Overall job performance (individual)	How well each employee is performing across all job expectations
Relative overall job performance (individual)	How each employee compares to other employees (with similar tenure) supervised now or in the past, across all job expectations
Performance of job duties (individual)	How well each employee is performing on each job duty, such as: <ul style="list-style-type: none"> ○ Development and monitoring of safety plans ○ Maintains required contact with children, families, and caregivers ○ Completes necessary documents for court
Demonstration of competencies or essential behaviors (individual)	How frequently each employee demonstrates desirable competencies or behaviors, such as: <ul style="list-style-type: none"> ○ Reliability, oral communication, ethics, cultural humility ○ Seeking mandatory supervisor consultation



Demonstration of organizational citizenship behaviors (individual)	How frequently each employee engages in discretionary, extra-role behaviors, such as: <ul style="list-style-type: none"> ○ Volunteering ○ Suggesting process improvements ○ Assisting coworkers
Rehire (individual)	If the supervisor had the opportunity to consider this person for hire again, how likely it is that they would hire the person again
Recommend to others (individual)	If the supervisor were asked to make a recommendation for this person to do this job for another supervisor, what they would recommend
Discipline (individual)	Total number of disciplinary actions Total number of disciplinary actions of a given type (e.g., verbal warning, written warning)
Average performance (aggregate)	Total performance ratings across all employees divided by the total number of employees
Percent of high performers (aggregate)	Total number of high-performing employees divided by the total number of employees, multiplied by 100
Percent of low performers (aggregate)	Total number of low-performing employees divided by the total number of employees, multiplied by 100
Average number of disciplinary actions (aggregate)	Total number of disciplinary actions across employees divided by the total number of employees
Average number of disciplinary actions of a given type (e.g., verbal warning, written warning)	Total number of disciplinary actions of a given type (e.g., verbal warning, written warning) across employees divided by the total number of employees
Percent of employees with disciplinary actions	Total number of employees with disciplinary actions divided by the total number of employees, multiplied by 100
Percent of employees with disciplinary actions of a given type	Total number of employees with disciplinary actions of a given type divided by the total number of employees, multiplied by 100
Objective Measures	Numerous measures can be calculated from data in an agency's child welfare information system. Standard measures include those calculated and reported for the National Child Abuse and Neglect Data System (NCANDS) and the Adoption and Foster Care Analysis and Reporting System (AFCARS). There are also many other types of data that could be used to assess individual performance. Information is typically organized by program area and job function. Within each area, there are indicators of various aspects of



	performance, such as quantity, quality, and timeliness. Metrics should be selected that have the most relevance to the purpose for which they are being examined.
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Turnover and Tenure

Headcount Metrics

Headcount	Total number of employees on a given date
Average headcount	Total number of employees at the beginning of a time period plus the total number of employees at the end of the time period, divided by two
Average daily headcount	Total number of employees across every day in a period divided by the number of days in the period

Turnover Metrics

Overall agency turnover rate	Total number of employees who left the agency divided by the average employee headcount, multiplied by 100 (both counts should be from the same time period)
Overall job turnover rate	Total number of employees who left a given job divided by the average employee headcount for the job, multiplied by 100 (both counts should be from the same time period)
Internal agency turnover rate	Total number of employees who left a job and stayed in the agency divided by the average employee headcount, multiplied by 100 (both counts should be from the same time period)
Internal job turnover rate	Total number of employees who left a given job and stayed in the agency divided by the average employee headcount for the job, multiplied by 100 (both counts should be from the same time period)
External agency turnover rate	Same as overall agency turnover rate
Voluntary turnover rate	Total number of employees who voluntarily left the agency divided by the average employee headcount, multiplied by 100 (both counts should be from the same time period)
Involuntary turnover rate	Total number of employees who involuntarily left the agency divided by the average employee headcount, multiplied by 100 (both counts should be from the same time period)
Functional turnover rate	Total number of poor performers who left the agency divided by the average employee headcount, multiplied by 100 (both counts should be from the same time period)



Dysfunctional turnover rate	Total number of good performers who left the agency divided by the average employee headcount, multiplied by 100 (both counts should be from the same time period)
New employee turnover rate	Total number of new employees who left the agency divided by the average employee headcount, multiplied by 100 (both counts should be from the same time period)
Annualized turnover rate (using data from < 1 year)	Divide 12 by the number of months of data you currently have (12 months/ # of months of data) Multiply the number above by the turnover rate (for the period of <1 year)

Tenure Metrics

Average agency tenure of stayers	Total number of days employed in the agency across all current employees divided by the current agency headcount
Average agency tenure of leavers	Total number of days employed in the agency across former employees divided by the number of employees formerly in the agency (both counts should be from the same time period)
Average agency tenure	Total number of days employed in the agency across former and current employees divided by the number of former and current employees (need to select a time period for former employees)
Average job tenure of stayers	Total number of days employed in a given job across all current employees in the job divided by the current job headcount
Average job tenure of leavers	Total number of days employed in a given job across former employees divided by the number of employees formerly in the job (both counts should be from the same time period)
Average job tenure	Total number of days employed in a given job across former and current employees divided by the number of former and current employees (need to select a time period for former employees)
Percent < 6 months tenure	Total number of employees with < 6 months of tenure divided by the total number of employees, multiplied by 100
Percent < 1 year tenure	Total number of employees with < 1 year of tenure divided by the total number of employees, multiplied by 100

Costs

Cost per hire	Total costs of recruiting divided by the total number of hires (top-down metric)
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Recruitment source cost	Total costs of a recruitment source divided by the total number of hires from that recruitment source (top- down metric)
Cost per trainee	Total costs of training divided by the total number of training participants (top-down metric)
Cost per turnover	For a detailed bottom-up approach to calculating, see Graef, M. I., & Hill, E. (2000)

¹ Recruitment source refers to how the applicant learned about the opportunity, which may not be the same as the channel through which they applied (e.g., may have heard about it from a friend but applied via website)

² Any upward movement, wherein an employee moves to a job that is at a higher level than their current job

³ Any lateral movement, wherein an employee moves to a job that is at the same level as their current job

⁴ Any downward movement, wherein an employee moves to a job that is at a lower level than their current job