Quantifying Shift-Level Screening and Enrollment Demand to Inform Research Assistant Coverage

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Objectives: To identify when potential screening and enrollment work occur in an acute-care research program, informing routine and contingency research-assistant (RA) coverage planning.

Methods: At a single Level I trauma center, we retrospectively analyzed Level I/II trauma pages (January 2023–August 2026) and enrollment data (January 2023–July 2026) from 11 studies in which Level I/II trauma-page alerts prompted RA screening. Trauma pages represented potential screening work; enrollment events were individual study enrollments and represented study-specific RA work. Measures were analyzed separately, so a patient could contribute to both. Co-enrollments were counted separately because each generated study-specific work. Pages and enrollment events were assigned to, day (0700–1459), evening (1500–2259), or overnight (2300–0659) shifts. Chi-square tests assessed shift distributions. Because 2026 was incomplete, it was included in pooled shift analyses but excluded from annual-volume comparisons.

Results: Of 3,407 trauma pages, 1,609 (47.2%) occurred during evenings, versus 932 (27.4%) during days and 866 (25.4%) overnight (χ^2=297.8, df=2; p<.001). Evening was the highest-volume trauma-page shift in every available year (44.3%–49.5%). Of 720 enrollment events, 367 (51.0%) occurred during evenings, versus 202 (28.1%) during days and 151 (21.0%) overnight (χ^2=106.2, df=2; p<.001); evening was highest in every year. Across 2023–2025, mean monthly enrollment volume was greatest in summer (22.8), followed by fall (19.7), spring (16.6), and winter (15.5). Evening was highest in every season, including summer (108/205, 52.7%).

Conclusion: Potential screening and enrollment work were concentrated in evenings; enrollment patterns persisted across years and seasons. These demand signals can inform routine coverage and contingency planning. Without RA schedules, standardized workload measures, eligibility, or missed-enrollment data, staffing adequacy could not be assessed. Future work will link demand with RA availability..