

# Implementing Standardized Social Needs Screening on Inpatient Units of an Urban Children's Hospital

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## BACKGROUND

Unmet social needs negatively impact child health. In 2016 the AAP recommended pediatricians screen for social needs during clinical visits.

- Ambulatory evidence supports screening
  - Providers and caregivers support screening during hospitalization; but few hospitalists screen citing lack of time and resources
- A gap remains in literature about screening implementation for hospitalized children.

## OBJECTIVES

**1° aim:** investigate the effect of quality improvement (QI) initiatives on social needs screening in the inpatient setting; **2° aim:** explore predictors of successful social needs screening.

## METHODS

- **Setting/Design:** QI study with Model for Improvement in a, metropolitan, quaternary care, academic children's hospital.
- **Interventions:** "Plan-Do-Study-Act" cycles for implementation of standardized social needs screening using self-administered 10-item questionnaire (**Fig.1**). Key driver diagram developed by interprofessional team (**Fig.2**). Cycles: iterative screening workflow development; electronic health record (EHR) enhancements; deliberate practice; data feedback; educational conferences.
- **1° aim measures:** Outcome: % of discharged patients screened for social needs during hospitalization; Process: % of discharged patients with electronically documented questionnaires; Balancing: % of discharged patients with social work consults;
- **2° aim measure:** Association between patient & systems factors and successful screening.
- **Data Analysis:** 1° aim analyzed via statistical process control charts (p-charts); 2° aim analyzed via bivariate testing and logistic regression. Demographics analyzed via bivariate testing.

## RESULTS

- No demographic differences exist between baseline (240 patients) and intervention (140 patients thus far) groups.
- The baseline mean monthly social needs screening was 20%. Special cause variation was seen in June 2020. The intervention mean monthly social needs screening rate thus far is 57% (**Fig. 3**).
- The mean monthly % of discharged patients with EHR documented questionnaires (process measure) is 30% in the intervention period (**Fig. 4**).
- The balancing measure showed special cause variation in June 2020. Mean monthly % of patients with social work consults increased from 35% in baseline to 40% in intervention (**Fig. 5**).
- Length of stay greater than three days (OR 2.87 (95% CI 1.69, 4.88)) was a significant predictor associated with screening success vs. failure in adjusted logistic regression analyses.

Figure 2: Key driver diagram.

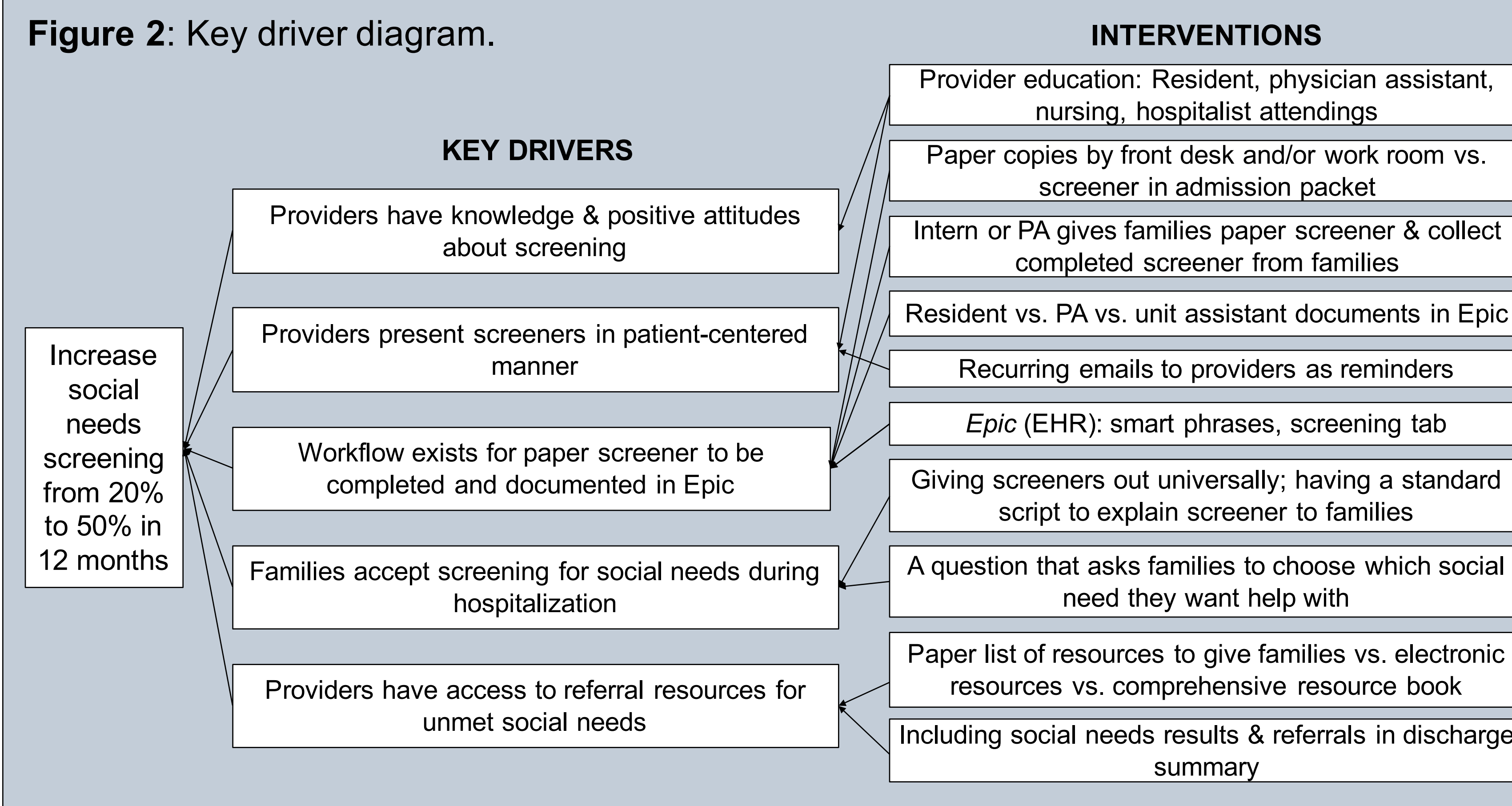


Figure 3: P-chart of percent of completed social needs screening by month.

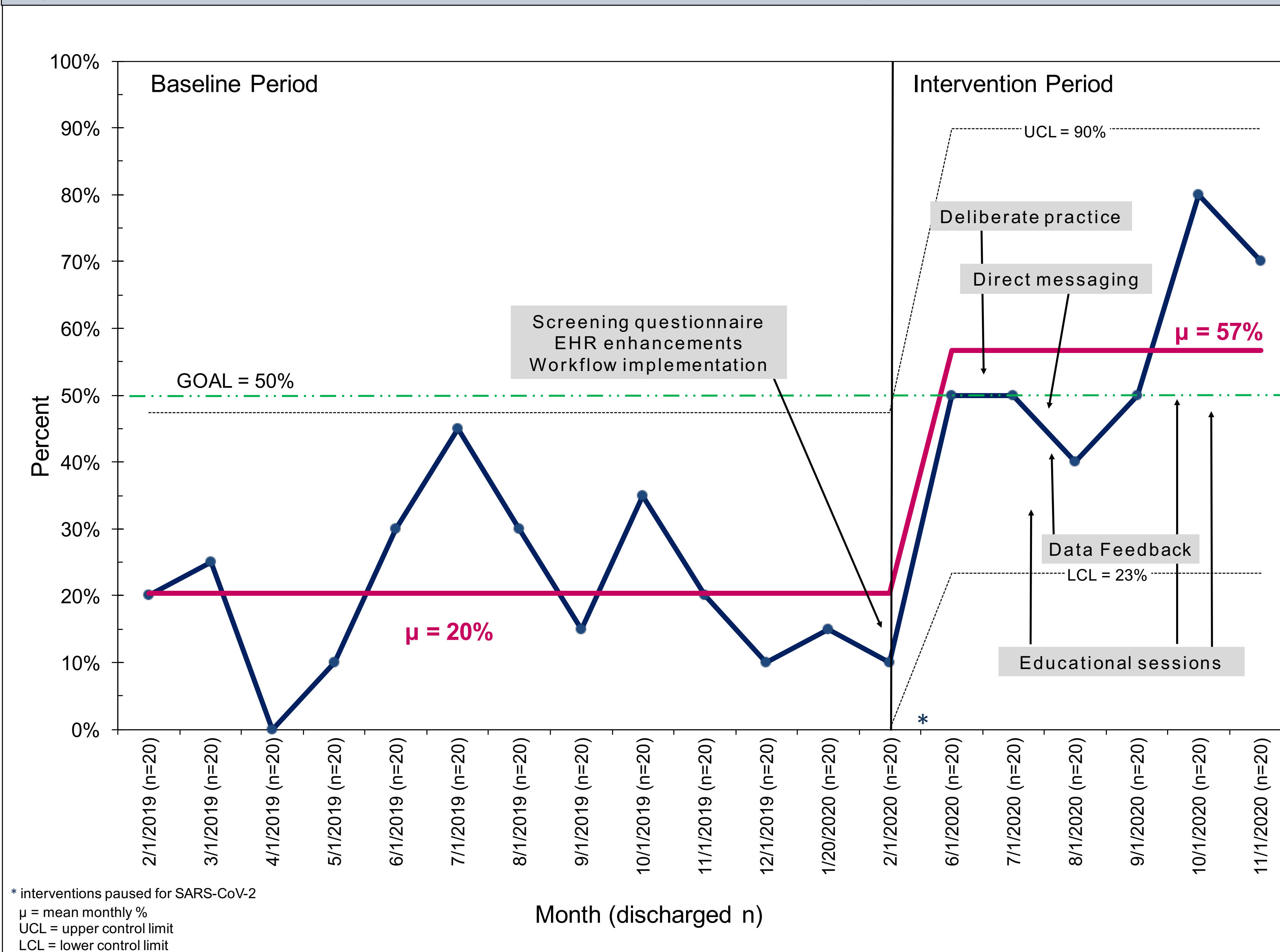


Figure 4: P-chart of percent of EHR documented questionnaires.

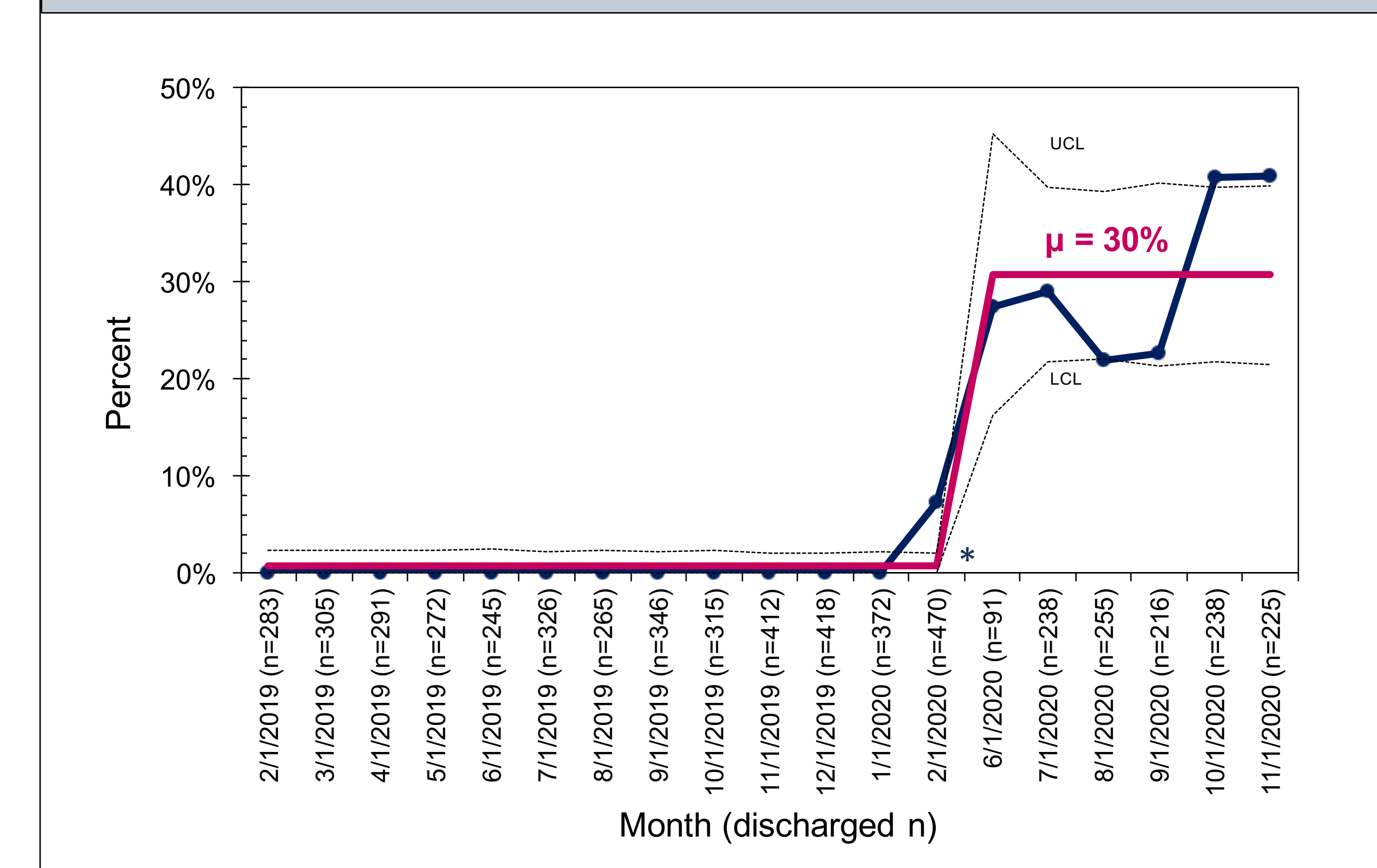


Figure 5: P-chart of percent of discharges with social work consultations.

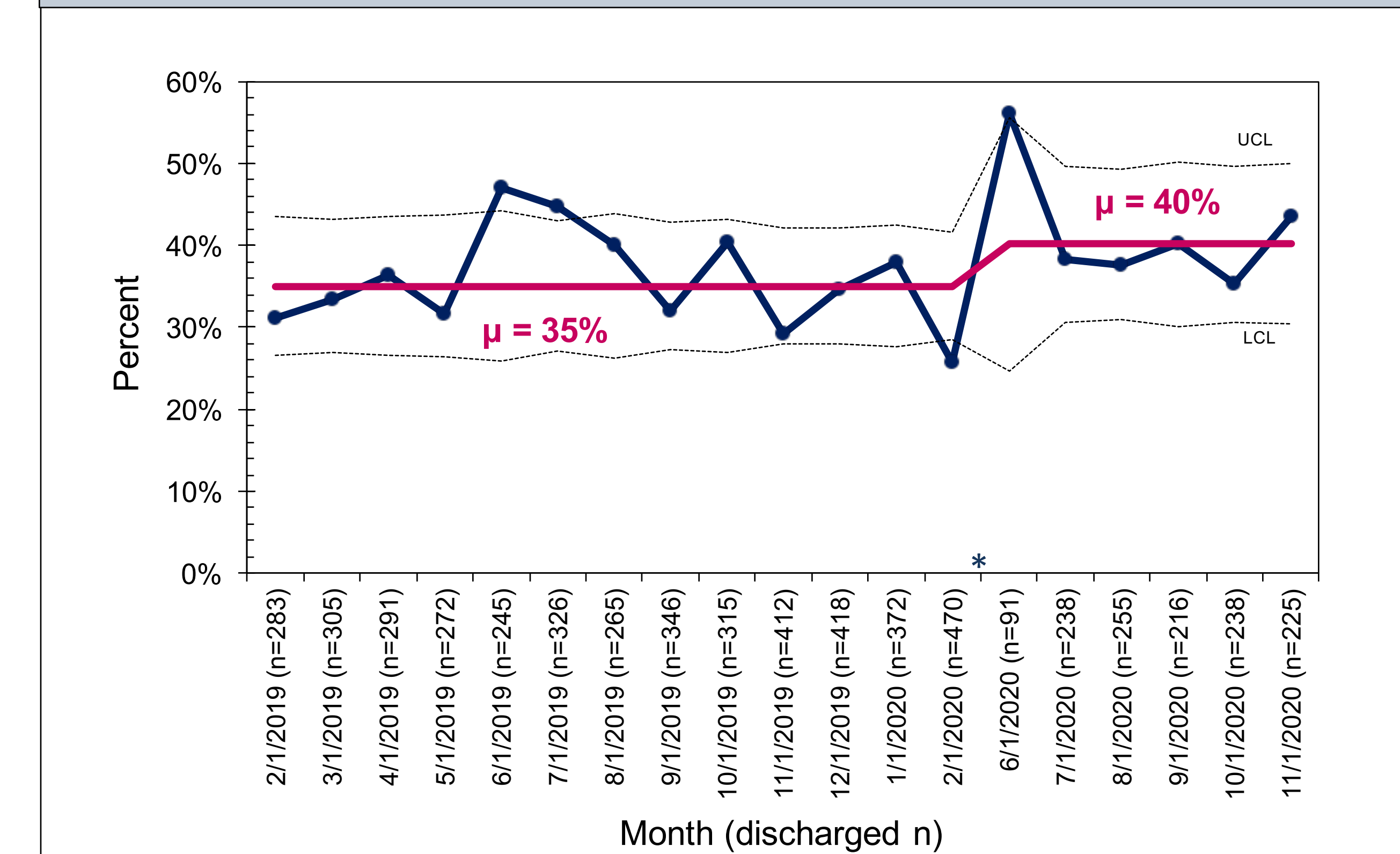


Figure 1: Self-administered questionnaire.

	YES / NO
Are you worried that in the next 2 months, you may not have a safe or stable place to live? (eviction, being kicked out, homelessness)	<input type="checkbox"/> Y <input type="checkbox"/> N
Are you worried that the place you are living now is making you sick? (has mold, bugs/rodents, water leaks, not enough heat)	<input type="checkbox"/> Y <input type="checkbox"/> N
In the last 12 months, did you worry that your food could run out before you got money to buy more?	<input type="checkbox"/> Y <input type="checkbox"/> N
In the last 3 months, has the electric, gas, oil or water company threatened to shut off services to your home?	<input type="checkbox"/> Y <input type="checkbox"/> N
In the last 3 months, has lack of transportation kept you from medical appointments or getting your medications?	<input type="checkbox"/> Y <input type="checkbox"/> N
In the last 3 months, did you have to skip buying medications or going to doctor's appointments to save money?	<input type="checkbox"/> Y <input type="checkbox"/> N
Do you need help getting child care or care for an elderly or sick adult?	<input type="checkbox"/> Y <input type="checkbox"/> N
Do you need legal help? (child/family services, immigration, housing discrimination, domestic issues, etc.)	<input type="checkbox"/> Y <input type="checkbox"/> N
Are you finding it so hard to get along with a partner, spouse, or family members that it is causing you stress?	<input type="checkbox"/> Y <input type="checkbox"/> N
Does anyone in your life hurt you, threaten you, frighten you or make you feel unsafe?	<input type="checkbox"/> Y <input type="checkbox"/> N

## DISCUSSION

- QI strategies improved social needs screening by 37%.
- Integration of social needs screening workflow inpatient was feasible; use of a standardized questionnaire was important.
- Social work consults increased after interventions.
- Patients with longer lengths of stay were more likely to be screened during hospitalization.