

revealed suboptimal adherence. Investigators developed a multi-tiered intervention program that included pamphlets, lecturers, and posters of the Checklist for the OR; the impact of these interventions on adherence has not been described. We hypothesized: 1) Interventions will improve Checklist adherence; and 2) Adherence is associated with positive perceptions about the Checklist and use of the Educational Interventions.

**Methods:** Between 06/2014 and 08/2014, a serial cross sectional study design was implemented at two hospitals. Surgical observations measured verbal confirmation of the WHO Checklist's 19 steps by the appropriate surgical staff in their prescribed order ("pre-anesthesia", "pre-incision", "pre-exit from the OR"). Questionnaires were administered to surgeons, anesthesiologists, and nurses. Questionnaires assessed perceptions of the Checklist, interventions, and surgical safety. Responses were compared among surgical staff position and hospital site using ANOVA, T-test, and Chi-squared analyses.

**Findings:** 45 surgeries were observed. Adherence to "pre-incision" Checklist items decreased significantly from 2014 to 2015 ( $P = 0.026$ ). The questionnaire response rate was 93%, with a total of 91 questionnaires administered. On a 1–10 scale, the mean rating of Checklist effectiveness was high, at 9.01 ( $SD = 1.54$ ). There was no association between adherence and Checklist perceptions or educational intervention use. Perceived unavailability of hard copies of the Checklist, lack of time and motivation to complete the Checklist were frequently identified barriers to adherence.

**Interpretations:** While educational interventions are still widely used amongst surgical staff, introducing these interventions did not result in better adherence. In this population, future training programs that prioritize making the Checklist widely accessible may improve adherence and surgical team communication.

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### Health outcomes of low birth weight infants following implementation of a community-based health surveillance intervention: an interim analysis.

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**Program/Project Purpose:** Low birth weight (LBW) < 2500g affects 8 million children annually and is reported in 43% of births in Gujarat, India. LBW infants are at high risk of poor growth and cognitive development, suffer from chronic diseases, and experience 20-fold higher mortality. This study aimed to determine the impact of a community-based participatory health surveillance intervention on growth outcomes and survival of LBW children in rural Gujarat.

**Structure/Method/Design:** This prospective cohort study took place at Mota Fofalia Pediatric Center (MFPC) in Gujarat, India. 1) A pre-intervention assessment of growth status was done in LBW infants born between 06/2012–04/2014. 2) In 06/2014, a health surveillance intervention was implemented for all LBW infants born at MFPC. Trained community health workers

performed pre-discharge counseling and post-discharge follow-up household visits with a standardized health assessment checklist and anthropometric measurements based on WHO recommended schedules. Children were referred to MFPC for clinical or nutritional danger signs. Outcomes included growth change and mortality in LBW children over time.

### Outcome & Evaluation:

- 1) 113 LBW children were included for pre-intervention assessment: 56% female, mean birth weight 2170g (600g–2450g), median age at follow-up 18 mo (1–28 mo) and mortality of 8 (16%). Among 95 live children, 63/95 (66%) were moderately malnourished and 28/95 (29%) were severely malnourished with weight-for-age z-scores of less than -2 SD and -3 SD, respectively (-5.59 to 0.91).
- 2) 433 LBW children were discharged from MFPC: 56% female and mean birth weight 2180g (660–2500g). Three children had incomplete birth data and 135 patients were lost to follow up. The median age at follow up was 24 days (range 2–399 days) with mortality of 9 (3%),  $p < 0.05$ . Among those who were successfully followed up, 115/286 (40%) of children were moderately malnourished and 58/286 (20%) were severely malnourished (-7.2 to 2.14).

**Going Forward:** This interim analysis showed that implementation of a structured discharge procedure combined with a community-based health surveillance intervention designed for trained community health workers was associated with improved growth outcomes and survival in LBW infants. Further evaluation of appropriate referral methods and health outcomes is needed.

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### Salt Reduction Strategy for Tobago (SRS-TAB) "Salt Smart Tobago"

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**Background:** Hypertension is a leading cause of morbidity and mortality worldwide and in CARICOM (Caribbean Community and Common Market) countries. This field experience will provide a multi-disciplinary team of students with an opportunity to work in collaboration with officials from a local health authority in the island of Tobago to initiate a dietary salt consumption reduction program. The field experience will comprise of two primary components: (1) an education component involving patient health promotion and education and working with local food establishments and other stakeholders to educate about and promote low salt food options, and (2) a data collection component to assess hypertension awareness. This summer field experience will be a pilot project of a larger endeavor by health officials in Tobago to reduce dietary salt consumption in Tobago to less than 5g per day per person by 2020, as recommended by the Pan American Health Organization (PAHO).