Post Discharge Telephone Follow up Reduces Early Hospital Readmission in Patients after Congenital Heart Surgery

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Background
Research shows many adverse events happen within the first 72 hours of discharge in patients after congenital heart surgery (CHS). We established a system of post discharge telephone follow-up (TFU) interview in 2012 to identify potential post discharge complications in CHS patients before they would escalate.

Methods
Structured phone calls were made 1-4 days post discharge, by senior surgical practitioners. Demographics and clinical outcomes of pediatric patients receiving a TFU from 2012 to 2014 were assessed. FFIEC Census Report (http://www.ffiec.gov/Geocode/default.aspx) was used to assess socio-economic status. Patient population consisted of 43 neonates, 61 infants and 61 children.

Results
There were 196 total phone calls with 1-4 phone calls per patient. A total of 34 health problems were identified in 32 patients. Of those, 47% (n=15) were identified in infants, 28% in children and 25% in neonates (p>0.05). Patient’s severity of disease as expressed by RACHS score, hospital length of stay, presence of GI/nutritional complications after surgery, preoperative genetic abnormality, and socio-economic status was not associated with TFU identified problems. The majority of problems were identified in middle-class patients (52%). Nine of the problems identified were GI complications that were resolved with minor interventions at home. Eighteen patients had adjustments of medications as a result of the TFUs. Six TFUs resulted in earlier than scheduled post-op clinic visits. Total 30-day readmission rate was 17.5% (n=29). There were 4 unplanned hospital readmissions of patients with identified problems at TFU. All of them were after the first post-op clinic visit. There were 25 readmissions of patients with no problems identified at TFU; 7 (24%) of these readmissions were before the first post-op clinic visit.

Conclusion
Timely post-discharge TFU is a useful tool in identifying post-discharge complications and modifying discharge instructions. We could not identify factors associated with the development of early post discharge problems. TFU appears to reduce hospital readmissions before first post-op clinic visit. We believe TFUs are helpful, as a supplement standard of care to help identify adverse events that could otherwise escalate.