

Getting the Patient Voice into the Electronic Medical Record: Using Parent-Completed Pre-Visit Tools to Customize and Improve Well Child Care

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Purpose/Objective: Determine the acceptability, feasibility and impact of an online quality improvement tool designed to integrate parent-responses into the EMR, promote adherence to Bright Futures recommendations, and customizing care to meet patient/family needs.

Design/Methods: The Well-Visit Planner (WVP) was evaluated using qualitative and quantitative metrics as part of a larger quasi-experimental study that engaged three pediatric offices in the implementation and evaluation of three patient-centered quality improvement interventions. On quality of care measures, the WVP site served as its own comparison using baseline and follow-up data collection, including the Promoting Healthy Development Survey (PHDS), experience surveys and focus groups. Qualitative results were analyzed using standard approaches to identify major themes across respondents. Descriptive statistics were used to describe each sample and standard independent samples T-tests and χ^2 were used to assess differences in the PHDS measures at baseline and follow-up. Logistic regression models comparing key measures were also used.

Results: 2,075 parents completed the WVP, which took an average of 9 minutes to complete. 92.2% of parents reported they would recommend it to other parents. Over 80% reported that the tool helped prioritize topics to discuss with their health care provider, and help them learn more about their child's development. All quality of care measures were more favorable post intervention. Adjusted odds ratios show four measures significantly improved at follow-up: 1) parent had their needs met on all physical care anticipatory guidance topics (AOR 1.67, 95% CI 1.11-2.50); 2) parent was asked about one or more family assessment topic (AOR 3.32, 95% CI 2.24-4.91); 3) parent had their needs met on all family assessment topics (AOR 2.23, 95% CI 1.10-4.53); and 4) comprehensive care measure was met (AOR 2.37, 95% CI 1.44-3.88).

Conclusion/Discussion: We found the WVP to be acceptable and feasible to implement for providers, staff and parents, resulting in improved content of well-child care. We found integration into the EHR logistically feasible but customization required dedicated staff and consultants. The culture of ongoing quality improvement at the practice level was important and parent engagement reflected the degree of provider engagement. We developed an operational model for engaging parents as partners in improving the quality of well-child care services, and several other projects are currently under way to refine this process and bring it to a larger audience. Widespread implementation of the WVP could improve the quality of well-child care, parent engagement in care, and provider ability to assess family needs.

Notes:

Results derive from a 12 pediatrician private practice and represent 2,076 WVP completions by parents. 43.2% of parents invited completed PCW. Median completion time was 9 minutes; 91.2% indicated comfort with length. Results were reliably transferred into EMR. Nearly 90% of parents picked priority topics to discuss. 57.7% had concerns about their child's development or behavior to discuss. Over 90% of parents reported they would recommend the PCW to other parents. 85.2% reported PCW helped prioritize topics to discuss, especially regarding their child's development. Access to online educational materials embedded in the tool was reported useful by 83.2% of parents. Each participating pediatrician reported an intention to continue use of PCW and that it improved ability to provide recommended well-child care. Providers also noted positive impact on quality of care for children whose parents did not complete the online, pre-visit tool due to the improvements made in EMR forms.

Conclusion/Discussion: Pre-visit patient engagement tools are feasible, effective in improving the experience of well child care visits.

Widespread implementation of this tool has the potential to improve the quality of wellchild care, parent engagement in care, provider ability to assess family strengths and stressors. As such, it could help well-child care better meet the needs of the child and their family and thus improve child health and wellbeing.

control for race/ethnicity, number of children in household, insurance type, amount of TV child watches, how well parent is coping with the demands of parenthood, if the child is a first child, parental depression, visit type and provider seen.