A Quality Improvement Collaborative to Improve Pediatric Primary Care Genetic Services

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Introduction

Results

Table 3: Adjusted Percent of Charts Achieving Aims using Random Intercept Binomial Regression Models

<table>
<thead>
<tr>
<th>Aim</th>
<th>Month 1 (n=95)</th>
<th>Month 2 (n=101)</th>
<th>Month 3 (n=107)</th>
<th>Month 4 (n=99)</th>
<th>Month 5 (n=98)</th>
<th>Month 6 (n=97)</th>
<th>Wald’s Chi Square (df=1)</th>
<th>p_value</th>
<th>95% CI</th>
<th>p_value</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1</td>
<td>10 (9, 12)</td>
<td>6 (2, 16)</td>
<td>60 (32, 83)</td>
<td>&lt;0.00</td>
<td>80 (52, 93)</td>
<td>0.00</td>
<td>1 (67, 85)</td>
<td>86%</td>
<td>(83, 93)</td>
<td>&lt;0.00</td>
<td>(83, 93)</td>
</tr>
<tr>
<td>A2</td>
<td>9 (6, 10)</td>
<td>78 (67, 86)</td>
<td>80 (76, 86)</td>
<td>0.51</td>
<td>75 (80, 86)</td>
<td>0.30</td>
<td>1 (67, 85)</td>
<td>86%</td>
<td>(83, 93)</td>
<td>&lt;0.00</td>
<td>(83, 93)</td>
</tr>
</tbody>
</table>

Conclusions

- This national QI collaborative in 13 pediatric primary care practices demonstrated statistically significant improvement in 6 of 11 process aims related to the diagnosis and management of children with genetic diagnoses. Five of these 6 aims showed sustained improvement 6 months after the conclusion of the collaborative.
- Collaborative QI projects can help busy ambulatory pediatric practices deliver best-practice care for patients.

Methods

- Study was conducted from March 2013 to March 2014 with the AAP’s QuIIN (Quality Improvement Innovation Network), a national group of pediatricians interested in improving the quality of care for children.
- Potential participants were solicited from the QuIIN listserv and obtained both CME credit and American Board of Pediatrics MOC Part IV credit.
- Each practice identified a core improvement team, led by a physician and 5 to 10 other practice members (e.g., physicians, nurses, office staff).

Preparation Phase

- An expert group, comprised of geneticists, primary care practitioners, quality improvement specialists, QuIIN staff and health services researchers developed QI aims, measures and tools for practices.
- Practices completed pre-control work including collecting baseline data and pre-assessments of the current state of their practices in relation to collaborative aims.
- In March 2013, core improvement teams participated in a two-day, in-person learning session led by the expert group.
- Additionally, practices were connected with a geneticist or genetic counselor in their region who served as both a resource for future genetic cases and a connector to local genetic practitioners.

Active Improvement Phase (6 months)

- Practices participated in monthly collaborative webinars, a listserv, phone or email contact with their regional genetics, data collection, and data feedback regarding practice performance.
- Practices then participated in a second in-person learning session that focused on similar topics as the first learning session, sustainability of QI gains, and connecting teams to the impact of project on patients.

Follow-up Phase

- Practices were no longer exposed to collaborative interventions; the listserv remained open, but was appreciably less active.
- Six months after the second learning session, practices were asked to submit a final report of sustainability data.

Toolkit

- A Toolkit to Improve Care for Pediatric Patients with Genetic Conditions in Primary Care provides practice improvement strategies, tools and measures for integrating genetics into primary care and taking a meaningful family history.
- The toolkit resulted from an extensive evaluation by the 13 teams involved in this project; reviewed by primary care physicians; is intended for use by physicians, nurses and allied health professionals in the primary care setting.

Project Objective & Aims

- **Overall Project Objective:** To improve the collection of family history in pediatric primary care practices.

- **Specific Project Aims**
  1. Achieve following outcomes for 90% of patients aged 0-21 years:
     - Create or update maintain PHR at health supervision visits, using the family history components defined by the project.
     - Discuss current family history with patient/family.
     - In patients with a positive family history and/or whom clinical concerns of a genetic condition identified, document in the chart that a follow-up plan of care was discussed with the patient/family.
  2. Implement the following systems:
     - Accommodation of patient’s special needs at office visits.
     - Reminder/recalling patients due/overdue for preventive services.
     - Referral tracking mechanism.
     - Process/written protocol for use of a standardized family history tool.

Acknowledgements

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