

Integrating Residents into Longitudinal Quality Improvement Projects:

Check-out Process in Primary Care – identifying efficiencies and improving follow-up with specialist referrals

The Problem

How to involve and integrate residents into longitudinal quality improvement (QI) activities in the context of short rotation-based resident experiences?

- Medicine residents at Beth Israel Deaconess Medical Center (BIDMC) complete a 3-week Stoneman QI rotation in teams of three residents, which includes didactic study; root-cause analyses; and a QI project mentored by core faculty.
- Despite having dedicated residents assigned to work on ambulatory projects, their projects frequently remain in early phases of Plan-Do-Study-Act (PDSA) cycle and are not well connected to the ongoing QI efforts within the practice.
- The “check-out” process for the primary care practice was identified as an area that could benefit from an improvement process - ensuring that patients understand their plan for follow-up; that follow-up appointments and specialty appointments are scheduled, and that labs ordered are drawn. This is a complex and important part of the care provided and one which is subject to many barriers to achieving the desired goals.

Aim/Goal

- Develop a framework to involve residents in meaningful longitudinal quality improvement activities.
- Implement a year-long resident QI project identifying and testing out improvements to the check-out process of a large academic primary care practice and patient follow-up.

The Team

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The Interventions

The Stoneman residents teamed with their preceptors to develop a year-long QI project plan to improve the check-out process and patient follow-up with their care plans.

- Three separate teams of Stoneman Residents scheduled during the year are given protected time to accelerate design, analysis, and change efforts.
- All 158 residents work on the project during their ambulatory rotations.
- Core faculty functioned as project advisors for planning and analysis.
- The Primary Care Chief Resident functioned as the project manager and shepherded the project with the residency at large.

Check-out process QI project:

- Pre-intervention study:
 - First group of Stoneman residents gathered current performance data through observation of the pre-intervention check-out process.
 - Follow-up appointments at HCA scheduled by a Medical Assistant; average time of 3.1 minutes per patient. 33 of 40 had follow-up appointments scheduled.
 - For Specialty appointments, patients were given telephone number and asked to schedule. Only 4 of 16 recommended specialty appointments were scheduled.
- QI Intervention:
 - Second group of Stoneman residents (Dates) designed and implemented a check-out sheet for recommended follow-up.
 - A check-out desk was introduced where a clinical administrative assistant helped patients schedule HCA follow-up as well as specialty appointments.
 - Residents on ambulatory provided feedback and were asked to use the new sheet in practice.

The Results/Progress to Date

Third group of Stoneman residents analyzed post-intervention data at 2-weeks:

- 97 of 99 (98%) patients with recommended HCA follow-up were scheduled.
- 28 of 63 (44%) recommended specialty appointments were scheduled.
- 24 of 30 (80%) recommended radiology appointments were scheduled.
- Average time for check-out was 3 minutes (did not increase with new check-out process).
- 100% patients received visit summaries with new check-out process.
- Surveyed patient satisfaction with the new check-out process. Of 18 respondents, 14 were “very satisfied”; 3 were “satisfied”; and 1 “unsatisfied”.

Lessons Learned

- Three blocks of Stoneman Residents with hand-offs to the Chief Resident and residents were able to follow the PDSA cycle on longitudinal QI project.
- Using PDSA cycle, nearly all follow-up appointments were scheduled at visit and percentage of specialty appointments scheduled increased to 44% compared to 25% pre-intervention.

Next Steps

- Develop plan to generalize new process across the practice.
- The team identified follow-up to lab results as the next longitudinal QI project.
- We plan to survey residents about experience with longitudinal QI projects and identify opportunities to improve the process.



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