

The impact of a quality improvement program on genetic counseling

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I. Introduction

The development of quality improvement (QI) programs in healthcare has grown over the last decade. As defined by the Health Resources and Service Administration (HRSA), "Quality Improvement consists of systematic and continuous actions that lead to measurable improvement in health care services and the health of target patient groups." At Integrated Genetics, a robust quality improvement program is a central feature of the clinical genetic counseling program. This program has been created to meet the four principles of a QI program including 1) understanding of systems and processes that impact patient care, 2) focus on patients, 3) focus on care providers (genetic counselors) as part of a team and 4) focus on use of data to impact patient care. Currently, the program evaluates quality monitors for every patient seen for reproductive genetic counseling. Quality monitors are clinical data points based on best practices in genetic healthcare and society-based guidelines. The entry of these data points into the clinical database system generates a personalized genetic counseling report for each patient.

II. Procedure

System and Processes

Clinical data points entered for every patient

Quality reports evaluate variances in compliance with best practices

Focus on Patients

Goal is to provide standardized patient care in a national program

Review and update best practices based on literature review and professional society guidelines (ACOG, NSGC, ACMG)

Focus on Genetic Counselors as Part of a Team

Genetic counselors receive bimonthly feedback of personal QI data

Genetic counselors are part of the QI team that reviews data, develops monitors, etc.

Focus on Use of Data to impact Patient Care

Follow-up discussion with patients as indicated by corrective action investigation

Development of educational programs for genetic counselors based on QI data

III. Findings

- Data was gathered from 37,725 patients referred by physicians to Integrated Genetics for reproductive genetic counseling in the time period January 1, 2016 to December 31, 2016.
- In 2016, 99.4% of clinical data entered into the IT database required no corrective action investigation. Corrective action investigation was required in 0.6% of cases.
- In this group, five quality monitors accounted for 53% of corrective action:
 - High risk ethnicity for hemoglobinopathy – document risk/offering testing
 - Recurrent spontaneous abortions – offer peripheral blood chromosome analysis
 - Patient/partner carrier of genetic disorder – offer fetal testing
 - Offer Fragile X population based carrier screening as directed by physician
 - Serum screening offered post CVS
- In the remaining group of corrective action investigations, 47%, there were 1-2 corrective actions among 38 different monitors.

IV. Discussion

When a monitor for an individual patient does not match the correct response, the genetic counselor is notified. The next step is follow-up with the patient to communicate the correct information and revise the genetic counseling report to the referring physician, as indicated. This comprehensive review ensures that standardized genetic counseling services can be provided to a large, diverse population found in a national program. Through systematic review of quality monitors, targeted educational programs are developed to meet the continuing education needs of both recent graduates and experienced genetic counselors. Review of current literature, society guidelines, and clinical best practices enables the program to stay current in a rapidly changing field of genetics knowledge. The genetic counseling team has developed a tool kit to promote quality patient care including a chart checklist and specialized video training programs to assist with review of charts and genetic counseling reports.

V. Conclusion

A focus on quality patient care in genetic counseling drives the national QI program at Integrated Genetics. A future addition to our program would be the evaluation of patient satisfaction and knowledge transfer in genetic counseling sessions. Insight gained from our experience in QI has led to targeted areas for improvement in genetic counseling best practices and genetic counselor education. As a core component of our Genetic Counseling Services, the QI program will continue to evolve and adapt to meet the changing needs of the patients and clients we serve.