MAYO CLINIC

Increasing patient access by optimizing limited resources: It's in our DNA

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Background: Genetic Counselors (GCs) play a critical role in today's healthcare by translating complex genetic information into actionable information and care plans. GCs are Masters-trained healthcare professionals who are board-certified. They also hold licensure in some states. The US has experienced increased demand for GC services, driven by advances in diagnostic testing and treatment options for genetic conditions (Raspa, 2021). Consequently, the profession is experiencing a significant shortage driven by demand for services, talent competition, and burnout.

Genetic Counseling Assistants (GCAs) were introduced to the Department of Clinical Genomics at Mayo Clinic in 2016. GCAs have become instrumental in addressing the demand for GC services, as they procure medical and family histories, facilitate education, track testing, and facilitate sharing genetic test results under supervision of a GC.

Objectives: The goal of the project was to increase access to genetics care with a scalable care model without causing staff turnover.

Planning/research methods: Process mapping of tasks and handoffs identified opportunities for improvement in patient flow and provider workflow. Key factors included pre-scheduling patients rather than ordering ad hoc, and assistance with negative genetic testing results.

The average number of new diagnoses per week was modeled to create a staffing model for one GC FTE and one GCA. A PDSA approach was used to evaluate the project on a periodic basis and make changes or clarifications to meet the project goals.

Data was collected on staff satisfaction with the revised care team model after the initial trial period. GC retention data is routinely collected in the department.

Implementation methods: The Genetic Counseling Care Team model (GC Care team) was implemented in September 2019. In the new model, two GC Care Team appointments were scheduled for every new breast cancer patient under age 65 from Mayo Clinic's Breast Clinic as part of a patient's initial appointment itinerary, rather than ordered by a provider after the initial appointment. The model quickly expanded to serve all ages, and to other cancer indications.

In the first part of the team appointment, a GCA collects family history information and constructs a pedigree. An educational video is played for the patient. The GC then counsels the patient and genetic testing is selected and ordered. GCAs facilitate the test ordering process and assist with negative results. In the old model, GCs completed these tasks alone.

Results: The new model increased access, optimized workflows, and supported an increased number of patients served. There was not a negative impact on GC retention observed. Revenue was not negatively impacted.

Increased Access: With roughly 1.0 FTE of GCA support, one GC FTE has capacity to see 48 patients per week, compared to 20 in the old model. This model has allowed the department to maintain and expand access for cancer patients throughout the pandemic and staffing fluctuations. The GC Care Team model is applicable to a wide range of indications, spanning cancer and non-cancer indications and is being (or has been) adopted for patients in obstetrics and gynecology, colorectal cancer, cardiovascular, and testing for specific familial mutations.

Table 1 describes oncology-related GC appointments and GC FTE. The number of cancer patients served has increased dramatically over the time since implementation, while GC FTE allocated for cancer indications has grown modestly. By utilizing an efficient care team and focusing GCs on genetic counseling activities instead of administrative tasks, access has increased for cancer patients.

Table 1. Oncology-related GC appointments

Year	GC Care Team Appointments	GC Standard Appointments	% GC Care Team Appointments	GC FTE*
2019	172	156	52%	3.3
2020	488	377	56%	2.7
2021	577	503	53%	4.3

* Average GC FTE specializing in cancer indications during each year

Staff Satisfaction & Retention: After initial implementation, 83% of staff engaged in the model preferred the efficient GC Care Team model to the on-demand model that was in use prior. 17% of staff were neutral (Kemppainen, 2020). During the time frame of the GC Care Team model usage, average GC retention increased 14%. GCs have a mix of GC Care Team and Standard appointments to bring variety to clinical practice.

Key Lessons:

- Efficient models that dramatically expand access to genetics care with are achievable. As demand for genetics care increases, innovative models will be needed to meet patient needs across specialties.
- Providers want to meet patient needs, including seeing more patients – the key is to provide the support and processes to do so.
- Identifying a large patient population whose needs can be met efficiently creates additional access for all patients.

References:

Raspa M, M. R. (2021). Barriers and Facilitators to Genetic Service Delivery Models: Scoping Review. Interact J Med Res.

Kemppainen, J. High Volume Breast Cancer Genetic Counseling Pilot: Alternative Delivery Model to Increase Patient Access. Poster presented at: American College of Medical Genetics Conference; March 22-25, 2020; Virtual Conference.

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