ESHG

COMMENT

Demolishing the silo: towards team-based genomics in primary care

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Genomic technology has not yet reached its potential to impact patients along the full spectrum of healthcare. The limiting factor was once mainly technological: sequencing was expensive and time consuming ($2.7 billion and 13 years for the Human Genome Project). With the advent of affordable (~$1000) genomic, exomic and pharmacogenomic sequencing, the barriers to clinical use of this technology have become mainly interpretive and logistical: (1) How can physicians convert raw genomic data into actionable clinical information?, and (2) Where will patients be able to access genomic services?

"Siloing" of genomic services within specialist practices or at tertiary care, academic medical centres presents a further barrier to full deployment of genomic services [1]. There is ongoing work to move some genomic services into primary care [1]. Primary care environments offer the potential for team-based care that is accessible, coordinated, and evidence-based. Primary care physicians, however, remain deeply uncomfortable with providing genomic services [2]. Indeed, despite preventive care guidelines that recommend primary care physicians refer patients to genetic counselling services [3], primary care physicians often fail to meet this need [4, 5].

One approach to expanding access to genomic services is to embed a genetic counsellor directly into a primary care clinic. Similar approaches to embedding services within primary care have demonstrated good results for other aspects of care (e.g. embedding of integrative behavioural health specialists) [6].

In this issue, Slomp and colleagues describe a model for understanding the team dynamics that influence collaboration with an embedded genetic counsellor in primary care as part of the GenCOUNSEL study [7]. Using a semi-structured interview approach, they analyze the attitudes of primary care staff towards collaboration with a genetic counsellor embedded at the Cool Aid Community Health Center in British Columbia, Canada. Their analyses covered a wide variety of staff including physicians, nurses, medical assistants, pharmacists, counsellors, dieticians, research coordinators, physiotherapists and administrative staff. They describe collaboration as a continuum from disinterest/resistance to pre-collaboration to initial collaboration to effective collaboration. No participant was beyond the pre-collaborative stage ("cautious curiosity") at the beginning of the study, but nearly all had moved to initial or effective collaboration by the end of the study.

This study has some limitations that should be considered. Most importantly, this study captures a particular timepoint at a single location in a vulnerable patient population (Cool Aid serves a large proportion of persons suffering from unstable housing or substance use). It seems reasonable to think these results may generalize to situations that are sociodemographically similar, for example, North American urban safety net clinics. Further work understanding the team dynamics at other (international) sites would be beneficial to parse out which attitudes are specific to the Cool Aid clinic and/or North America, and which are more generally applicable. Further analyses of team dynamics from the perspective of genetic counsellors embedded in primary care would also be beneficial.

Considering the discomfort many primary care physicians experience with effectively using and communicating genomic information, the need for a team-based approach to offering genomic services in primary care will likely only increase. Slomp and colleagues have provided a reference point to consider how team dynamics will influence effective collaboration with genetic counsellors embedded in primary care.

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COMPETING INTERESTS

The author declares no competing interests.

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ADDITIONAL INFORMATION

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