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**Using novel methods to measure implementation outcomes for genomic integration into healthcare settings**

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**Objectives/aims**

Genomics is a complex technology being introduced into an already complex system that is healthcare. It is the most disruptive innovation since antibiotics or MRIs and because of this we require an understanding of the barriers and facilitators of genomic implementation into healthcare. This can be done by evaluating the implementation process using Implementation Outcomes. In this national study, we had two overarching aims: 1) to develop a mix-methods tool that measured implementation outcomes from the perspective of multiple stakeholders over a longitudinal period of time, 2) to empirically test new method via evaluating the implementation of genomics within nephrology clinics across all states within Australia. Only the results of aim 1 will be presented for the fishbowl discussion.

**Methods**

For the GEIS summit, presenting author will facilitate an open fishbowl discussion with engagement from the expert audience. The discussion will revolve around the first phase of the study. In this phase, the implementation outcomes published by Protoctor (2011) were mapped to the constructs of the Consolidated Framework for Implementation Research (CFIR) via a rigorous method by a panel of expert implementation scientists globally. This was done to enable the measurement of specific constructs that drive associated outcomes. Then, both quantitative and qualitative tools were designed using the theoretical mappy of outcomes to CFIR constructs. These tools included surveys, semi-structured interviews, case studies, and audits from the perspective of multiple stake holders, including clinians, clinical geneticists, genetic counsellors, patients, and genomic laboratories. The fishbowl discussion will begin with a brief presentation of new methods, followed by critical assessment of the new methods by the audience. Four chairs will be used for the audience, and members can join or leave discussion at any time. Presenting author will facilitate discussion, ask questions, and take notes.

**Main findings**

Only the results for phase I of the study will be presented at the GEIS, which included the design and evaluation of new methods for measuring implementation outcomes longitudinally from pre-implementation, implementation, to post-implementation. It is expected that the fishbowl method will provide critical insight about the new methods by a diverse expert audience. The discussions will add to the design of the new method, as well as engage the audience in implementation outcome measurement tools that are based on systematic theories and frameworks. It will be a direct request for diverse collaboration by those involved in various aspects of implementing evidence-based technologies into new environments.