Centre for Genetics Education NSW Health Australia

Kate Dunlop: Director

A Needs-Based Approach to genomics education



The Centre for Genetics Education NSW Health:

- a state-wide government education program of the NSW Genetics Service
- provides genetic information and education to a wide range of audiences
- current focus is to assist non-genetics health professionals with the skills and knowledge to manage the impact of genetic and genomic technologies on their practice.

www.genetics.edu.au



The Australian Context

- Mix of public (Commonwealth and the states) and private
- Commonwealth funds Medicare (GPs), national screening programs
- States responsible for funding hospitals
- Genetic services relatively consistent across Australia
- States have different priorities eg education
- National Professional Colleges and Associations
- Challenge: state v national organisations/funding/approaches
- Good news: Development of a National Genomic Strategy Framework just commenced

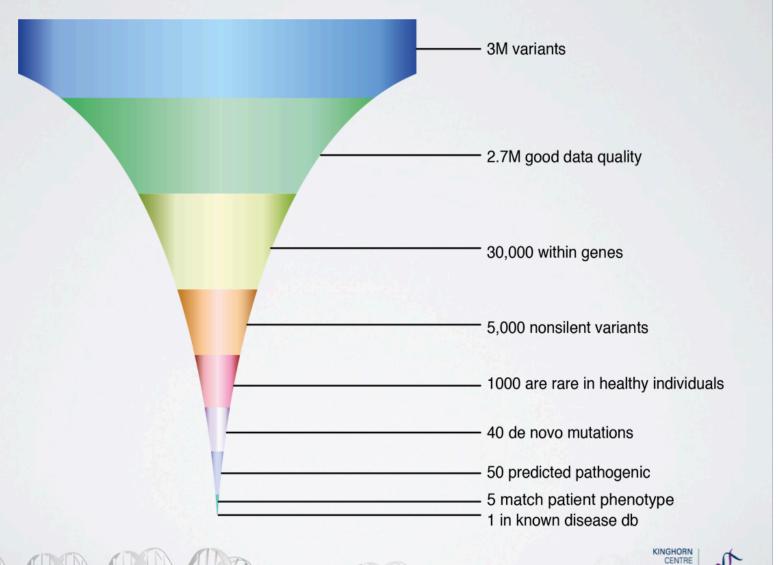
Centre's Strategy for NSW

- Program goals: Assist health professionals manage the impact of genomics on their clinical practice through Continuing Professional Development (CPD) and point of care tools
- Needs based approach
 - Identify gaps/needs (2016)
 - Develop resources to provide a foundation for further educational strategies (2017)
 - Implementing programs 2018
- Genomic expertise: NSW Clinical Genetics Service, Garvan Institute of Medical Research, Australian Genomic Health Alliance (AGHA) Program4

Needs of medical specialists ordering genomic testing

- Partnership with the Garvan Institute of Medical research
- Qualitative semi structured interviews early adopters
- Clinical Geneticists (15), Medical Specialist ordering testing(10)
 - Unanimous agreement for need for education
 - Occur through a number of avenues
 - Need for different models of care
 - Spectrum of educational needs
 - "not everyone wants to know the finer details. They just need to know enough to get on and be conversant with their patients"
 - Challenges Interpreting genetic variants
- 2017: Currently deciding on the resource to develop to focus on "interpreting variants"

A typical rare disease filtering pipeline



Exploring the educational needs of allied health professionals, nurses and midwives

- Semi-structured interviews
- Recruitment via professional organisations and hospitals in NSW
- Findings

 Genomic fundamentals/impact on roles& practice setting
- Consistent with international competencies and programs
- Priority: How to talk to patients about genomics
- Online interactive educational module with cases for HETI (Health and Education Training Institute all online resources NSW) being developed 2017
- Trial before and after knowledge with 6 month follow up of impact on practice
- Hope to influence development of competencies



- Australian Genomic Health Alliance (AGHA)- a national network of clinicians, diagnosticians and researchers led by the Murdoch Children's Research Institute, Melbourne
- Funded to develop a roadmap for the integration of genomics into clinical care
- Program 4 is currently undertaking a national gap analysis and needs assessment to identify training and education requirements for health professionals



Information . Education . Insight

Director: Nicholette Conway

Stage: Developing and planning

Planned Activities:

- Pilot education seminar May with launch of Education Series in August (1 day seminars)
 - Focus on the interpretation of genomic research for use in clinical trials, regulatory and reimbursement (Payer) submissions
 - Hosted by the industry's key education provider
- Varied services from specific focus (Analyse a genomic journal article/ Case study in a disease state), to broad based "Lunch & Learn" for cross functional corporate groups
- Host a session at Healthcare Industry Conference with focus on educational needs to support regulatory and reimbursement requirements.

Response: Positive – 12 months ago no interest, now strong interest.

Comments: No funding for this, therefore fee for service model. Multiple partners needed to support model – from education specialists to clinical, scientific and regulatory specialists... and a lot of cooperation and good will!

Australian based

- facilitate education services to pharmaceutical, medical device and biotechnology industry and allied healthcare practitioners
- to support the integration of genomic medicine into clinical practice, clinical research, regulatory and reimbursement activities
- to ensure patients get appropriate and timely access to new treatments
- facilitate patient education and understanding in conjunction with patient advocacy groups

Thank you

