Safer and more effective prescribing

Video transcript

Business Victoria

-[Allan Sheffield – Managing Director, GenesFX Health] GenesFX was established by Professor Les Sheffield who's a clinical geneticist and he worked for I think over 30 years within the public system with the Murdoch Children's Research Institute and one of his areas of interest was an area of science called pharmacogenomics which is looking at how your genes effects drug response.

-[Associate Professor Les Sheffield – Clinical Genetecist/Director, GenesFX Health] Yes pharmacogenomics is a testing system to see how an individual reacts to drugs and it looks at whether that particular drug is right for the individual, whether it's likely to work and also whether it's likely to produce adverse effects or what we call side effects and so that we can avoid it and we can avoid it by changing the dose so we can tailor the dose to the individual and we do this by testing the genes and those genes are related to how the body processes the drugs.

-[Allan Sheffield]The unique thing about the software developed is really all about how we can take complex genetic information and present that in a really simple and easy to understand format so that the doctor can action it at the point of prescribing and that's really given the business I guess very strong

IP and allowed us to build some very complex algorithms that makes this

information simple for the doctor to use.

-[Professor Patrick Kwan – Neurologist, Royal Melbourne Hospital] And increasingly realising that genetics play a big part in specifically in epilepsy where my main interest lies we know that certain drugs not only do they not benefit the patient they can cause very severe side effects and these have a genetic basis to it. The term personalised medicine has been used around and often sometimes has different meanings and for I think as a nutshell we can summarise it as the right drug for the right person at the right dose given at the right time.

-[Allan Sheffield]The system has widespread benefits for patients at Melbourne Health because it really helps the doctor improve patient safety when prescribing but two, also is now a turnkey solution that really any hospital in Australia or around the world could use if they wanted to make pharmacogenomics applicable in their hospital.

-[Associate Professor Les Sheffield] Well their software has enormous potential because it's secure, web-based software which means it's not particular software that that hospital has got. It sits on their intranet in a secure fashion which means it can be

applied to any hospital in the world.

-[Professor Ingrid Winship – Executive Director, Research, Melbourne Health] One of the interesting things about research is that it can become very academic where a blue skies project is done and published and nothing changes for the for the patient for the stakeholders in this research. This process has been very interesting because it takes it to the next level and it takes it potentially to the marketplace and answers questions that are both clinically relevant and potentially commercially relevant so that we are actually taking the translation of research from concept to clinical practice to commercialisation. So it really does add a new dimension to what we're doing.

-[Associate Professor Les Sheffield] The system can be used in many other fields of personalised medicine. It obviously can be used in other aspects of pharmacogenomics so this software can be used to convert the raw DNA results into clinically useful reports just as we've done with pharmacogenomics so it has got very wide application.