

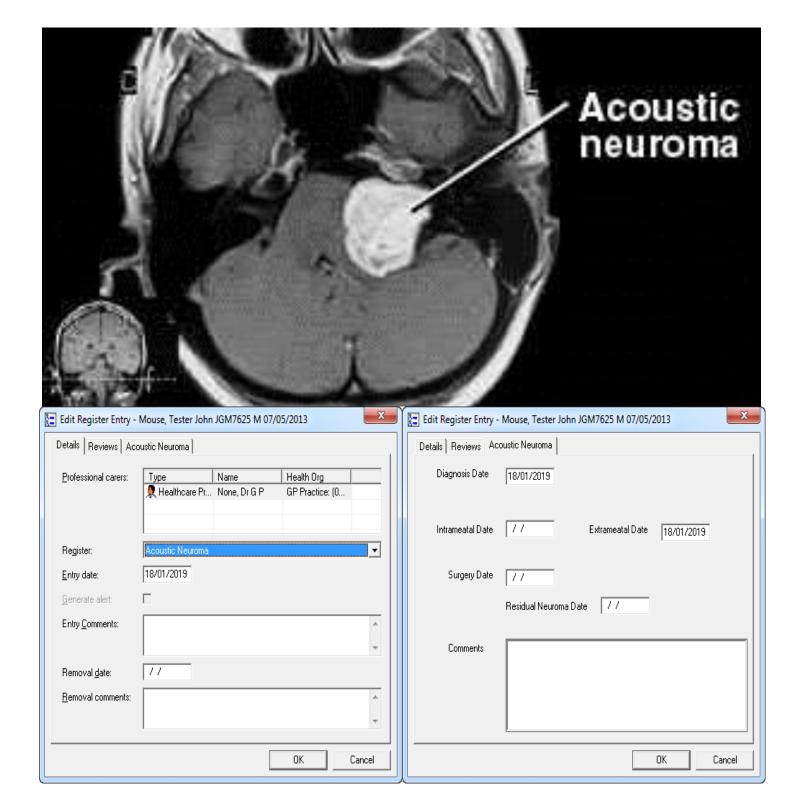
Acoustic Neuroma MRI Tracker

Waitematā District Health Board

In Dec 2018 a student project was initiated to support our ORL surgeons ensure patients diagnosed with an acoustic neuroma are treated consistently, and according to a surveillance protocol which can last 10-12 years (see table below).

An audit was conducted of all radiology reports and clinic letters (3,450) from Jul 2013 - Mar 2018 of patients who received an acoustic series MRI. Of the 159 with a positive diagnosis we collected the diagnosis date, type of tumour (intrameatal or extrameatal), date of surgery (if applicable), and date a residual tumour was found if there was one.

A new registry form was created in our patient management system (iPM) to capture this data. This information is important for determining when the next MRI is due, and when an MRI has been missed.



##

	First scan	Once a year follow up	Penultimate scan	Final scan		
Intracanallicular	9 months	until 5 years	7 years	10 years		
Extrameatal	9 months	until 7 years	7 years	12 years		
Auckland Regional MRI surveillance scanning protocol for AN by position of tumour						

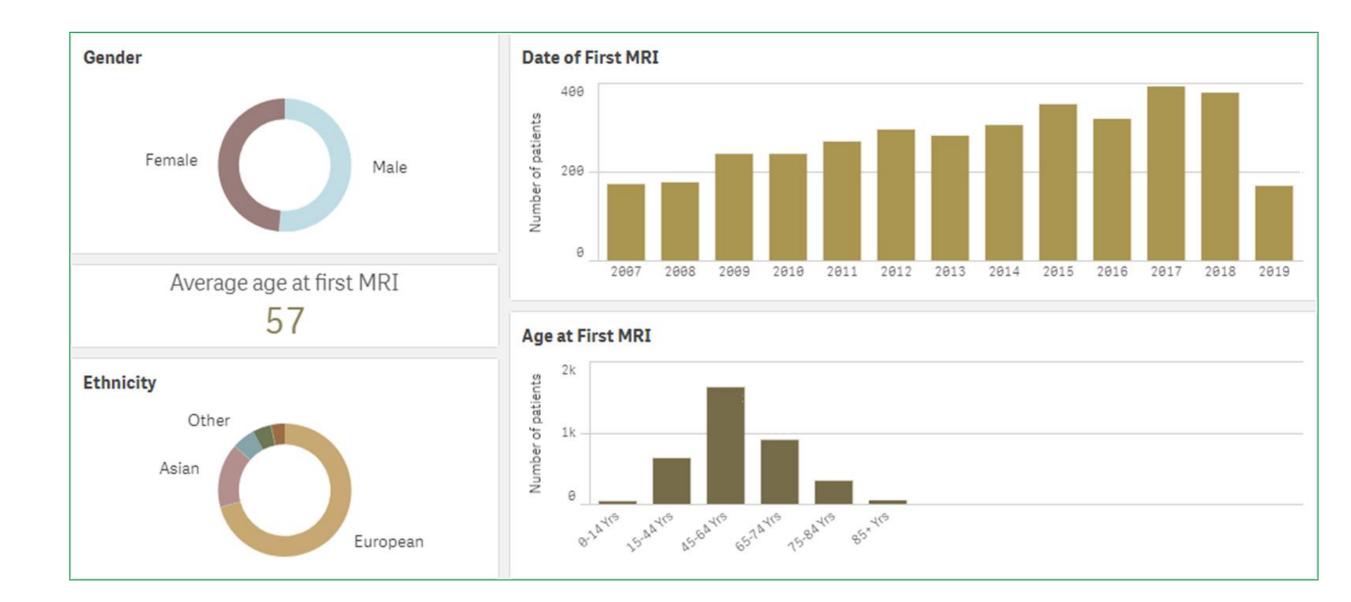
Acoustic Neuroma Pathway App

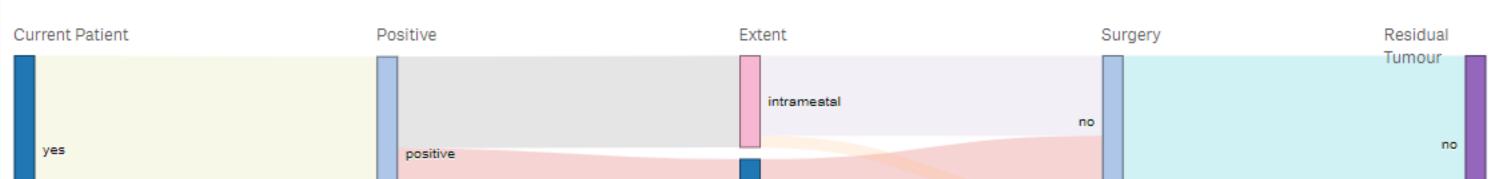
With support from our Data Discovery team to identify relevant tables, the student developed a Qlik Sense app to present the information from the registry, plus relevant radiology, regional and national data.

The app includes an MRI Tracker, summarised information for diagnosed patients, a patient details sheet which provides extra information about each patient, and a link to Clinical Portal for clinicians to access the patient's clinical information.

We can also now monitor the rate of positive diagnosis for acoustic neuroma against the number of acoustic series MRIs completed, to compare against other hospitals.

NHI Q	Values MRI Dates Q							
	Actual MRI Date							
	1	2	3	4	5	6	7	8
Li	24/06/2018	-	-	-	-	-	-	
М	27/01/2017	24/10/2018	-	-	-	-	-	
М	21/03/2016	21/08/2017	14/10/2018	-	-	-	-	
М	13/12/2013	-	-	-	-	-	-	
М	15/11/2011	8/09/2012	24/09/2013	7/11/2015	-	-	-	
N	22/01/2018	-	-	-	-	-	-	
N	21/06/2010	20/12/2011	12/12/2012	16/03/2014	17/02/2015	31/03/2017	10/03/2019	
N	17/02/2015	20/11/2015	20/11/2016	26/11/2017	16/02/2019	-	-	





no	extrameatal	yesyes		
Extrameatal tumours	Surgery patients	Residual tumours		
79 ^{52%} of positive patients	48 ^{32%} of positive patients	13 ^{27%} of surgery patients		



DISCOVERIES

- Following the audit and analysis of data in Qlik Sense, a new AN pathway was developed
- We now have a tool to track all patients with a diagnosed acoustic neuroma, and we can actively monitor their progress



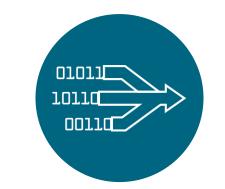
ACHIEVEMENTS

- With the Qlik Sense infrastructure we have established, a student was able to pull in relevant data to build a very meaningful app
- This is the first point-of-care registry of its kind to track a particular group of patients in clinic and can be a prototype for other registries



AUDIENCE

ORL Team Roles: Clinical Director, ORL surgeons, booking clerks



DATA AND ADVANCED ANALYTICS

- **iPM:** Identifies patients registered on AN registry
- **RIS:** MRI scan history for patients on AN registry
- **DeeR:** Referrals to Auckland DHB for surgery a
- **IDF:** Inpatient activity at Southern DHB (to identify any radiosurgery)



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