The Tees Remote ECG Pathway

The adoption of mobile ECG technology for monitoring patients on anti-psychotic medication

Dr Mani Santhana Krishnan FRCPsych - Consultant in Old Age Psychiatry & Senior Clinical Director, TEWV Lauren Bennett - Innovation Coordinator, TEWV Charlotte Fox - Programme Manager, Digital Transformation, AHSN NENC NHS

Tees, Esk and Wear Valleys NHS Foundation Trust



What was the problem?

All antipsychotics have a degree of cardiac risk including

• Arrhythmias

During pandemic we encountered additional challenges, including:

What was our solution?

- AliveCor KardiaMobile 6L ECG
 Monitor
- Licensed by FDA & CE for QT measurement

- Syncope
- QT Prolongation
- Torsade de pointes (potentially life threatening heart arrhythmia)
- Sudden cardiac death

- Lockdown/Shielding patients
- Social distancing
- Risk of side effects
- Issue for starting patients on medication
- We used the opportunity to pilot
- Real World Evaluation



17.5 minutes saved per ECG





255

days saved in 1 year across the Trust



£3,854

Approximate cost saved per team, per year



Approximate projected annual cost saving based on 85 teams using the device across the Trust

What did we do?

Real world evaluation funding - AHSN NENC

- 30 devices
- Shared among community and inpatient teams
- 3 areas in older Adult Psychiatry teams
- 2 areas of General Adult psychiatry team
- In-patient services
- Developed a local User
 Guidance form and got
 approval for the pilot from
 COVID gold command

Results

The amount of ECGs you can complete in a short period of time, with limited disturbance to the clients could really impact on our service.

I believe all Clinical Support Workers should have one, and Clinicians also (during assessments/disgnostics) it would substantially save a lot of time and money to the trust, in mileage and speeding up waiting times.

Results

Patient feedback

Patient responses to Usual and Remote ECG devices in anti-psychotic medication monitoring



Usual 12 Lead ECG deviceRemote 6 Lead ECG device

- Feedback surveys from staff
 and service users
- Cost and Time analysis

Read more... https://bit.ly/2Ptb505





If you took it off me I would cry!

It is so easy! Much less intrusive, I don't have remove clothing and I'm amazed at how small it is!

it is amazing, much less distressful, and the ECG was obtained so quickly Next steps

- NHSX funding for 140 devices to continue the project
- 100 devices for TEWV NHS
- 40 devices for CNTW NHS
- Envisage national adoption