# To establish a one stop checklist system prior to Cardiac CT to further improve patient care pathways.

Sunita Avinash, Chee Liew, Ranjit More, Ben Ward, Kerry Walker, Noel Topping, Anoop Chauhan

Lancashire Cardiac Centre, Blackpool Teaching Hospitals NHS Foundation Trust

Cardiac CT has become the preferred choice of investigation in the last few years. This was due to NICE recommendations in the chest pain pathway and now the GIRFT report. With increasing requests, the waiting list grew. This was exaggerated in Covid, when all activity came to a standstill. To maximise capacity and driven by a huge backlog, we successfully started radiographer led lists and then oral Bisoprolol pre-CTCA. This reduced the waiting times dramatically from 8 months to 4-6 weeks.

## What we did and found

An audit was undertaken of 100 random patients attending for cardiac CT between the months of September 2021 and February 2022 to understand the time taken for the checklist. The time varied depending on how much elaboration was needed and, on some occasions, longer if the patient was elderly or hard of hearing. We found from our information gathering:

5 min-13;6 min -16; 7 min 2; 8 min-12; 9 min -21; 10 mn-32:12 min-4.

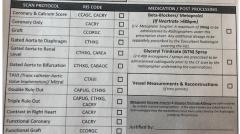
#### re you already on beta-blockers Do they take Metformin/Glucophage Yes, drug name & doseage Do they have any Kidney problems? Asthma, COPD, Emphysema, etc. Do they have uncontrolled Asthma? Do you have a Pacemaker? Do they have any Allergies? Are you currently in Heart Failure? Hyperthyroidism / Thyroid Co. Do you have Heart Block? Any previous reaction to Contrast Are you Allergic to beta-blockers reatinine (µmol/L) Do you have severe Hypotension? Urea (mmol/L) Do you have Aortic valve stenosis?

Checklist to be attached to cardiac CT request

Do you have Mitral valve stenosis?

Are you allergic to GTN or Nitrates?

the Radiographe



□ Date

pervised ☐ Unsupervised ☐ Private Patient ☐

To further streamline and improve numbers of scans done in existing sessions. The initial idea was to have a separate clinic room and checklist, but we were faced with lack of space and extra staff. Instead, the suggestion was to have the checklist done by the requesting clinician at the point of referral. This would screen out those unsuitable for CTCA and provide the opportunity to provide a pre dispensed pack of oral betablockers with instructions to start 5 days prior. This was pre-arranged with pharmacy and would be audited on a monthly basis

# no.of pts





# The data showed a variation in time taken to get the patient from the point of check in onto the scanner. In addition, some patients had to be set away due to heart rates, contrast reactions or

Signature

eGFR (ml/min/1.73<sup>2</sup>)

Date sample taken

Results

scanner. In addition, some patients had to be sent away due to heart rates, contrast reactions or arrhythmias. On a few occasions, the patient would refuse to undergo the scan due to claustrophobia. By uniform checklist at the point of referral, we would also not miss out those referred from different sources. The key stakeholders were involved, namely the pharmacist, nursing staff, referring doctors and the radiographers. The scan process would then only involve IV access and the study. Unfortunately, we were unable to trial this as the services were mainly through telephone consultations. As clinical practice returns to normal, we intend to run a pilot and audit the effectiveness of this change in practice.

## Lessons learned

ther (please specify)

By working together in a multi professional team and with the common mindset of improving services for our patients, we developed a radiographer led service for IV betablockade, then a protocol for oral betablockers. This was the next novel idea to further streamline and standardise the cardiac CT service.

What started out as small ideas and then changes suggested, led to a significant decline in waiting times and improved patient care. The department can do more cardiac CTs per session which in turn generates revenue for the department.





**Emerging Leaders Programme**