

Mohammed O A Abubakr¹ et al. On behalf of KERNOW CORONARY

1. Consultant Cardiologist and Clinical Lead for Chest Pain Service in Cornwall, Cardiology Department, Royal Cornwall Hospital, Penventinnie Lane, Truro, Cornwall, TR1 3LJ, United Kingdom

Introduction

The Royal Cornwall Hospital (RCH) is a large district hospital and is the only acute hospital serving Cornwall's increasing population and holidaymakers.

The chest pain team at the RCH assesses over 2500 patients referred to the Rapid Access Chest Pain Clinic (RACPC) every year. The team also provides some in-patient service and support to acute teams.

A significant increase in RACPC referrals and acute chest pain admissions over the past few years meant that a comprehensive review of the chest pain pathways was a necessity.

The need for this review has become a must over the past year as service provision challenges have become more apparent during the pandemic year.

Recent clinical guidelines, medical evidence, local RCH audits data as well as recommendations in the BCS' Future of Cardiology document and the GIRFT report have all been studied to lay the foundation for the KERNOW Comprehensive caRdiology chest paiN manAgement and tReatment pathwaY (KERNOW CORONARY).

Objectives

1. Integration of care provision between primary and secondary teams.
2. Clinical and educational support by the chest pain team to community (GPs and nurses) and acute (ED and MAU) teams to improve the quality of RACPC referrals and patents management
3. Reduce unnecessary admissions
4. Improve in-patient care and flow.
5. Reduction in the number of un-necessary investigations and treatments (both non-invasive and invasive) due to sub-optimal management of patients with diagnosed coronary artery disease.
6. Financial savings from the overall service improvement.
7. Business case development to support "KERNOW CORONARY" pathway and the appointment of 3 specialist nurses.

Methods

Over 3000 patient records studied and a large QI project incorporating 4 audits developed to study:

The effectiveness of the previous RAPCP & acute chest pain referral pathways and the utilisation of recent clinical guidelines and medical evidence and their influence on the overall chest pain service provision (targets) and patient flow.

The findings of the 4 audit projects :

Higher than national average of chest pain referrals to the RACPC service and chest pain presentations to the acute service, admissions to the acute hospital, bed occupancies and delayed discharges without change in management or need for further in-patient investigation.

Results

KERNOW Comprehensive caRdiology chest paiN manAgement and tReatment pathwaY (KERNOW CORONARY).

1. different types of chest pain clinics: RACPC, Hot clinic and medication optimisation
2. Updated RACPC and ACS referral pathways.
3. Development of a medical optimisation document.
4. Educational programme
5. Business case development to support "KERNOW CORONARY" pathway changes and the appointment of 3 specialist nurses, 1 research nurse and 1 admin staff.

The pathway is currently closely monitored and audited and initial results are encouraging:

1. Patient and clinicians satisfaction.
2. Improvement in RACPC targets.
3. Improvement in referrals for in-patient Cardiology review.
4. Improvement in bed occupancy by Cardiology patients.
5. Improvement in waiting times for in-patient invasive procedures.
6. Financial savings (anticipated at £ 225,000).
7. South West (& national) chest pain teams network. Work in progress.

Conclusion

Development of KERNOW CORONARY as a comprehensive pathway to manage patients with cardiac chest pain provides wide range of clinical benefits to patients and clinicians as well as financial savings to the NHS.

References

1. HES data.
2. ONS data.
3. NICE guidelines on recent onset chest pain (CG 95), 2016.
4. ECS guidelines on CCS, EHJ, 2019.
5. Future of Cardiology Document, 2020
6. GIRFT Report, 2021.
7. Maron et al. ISHEMIA Trial, NEJM, 2020..
8. Diagnosis and management of stable angina, JAMA, 2021.
9. Maroules et al. Understanding the CAD-RADS, JCCT, 2016.
10. Abubakr MOA et al. Appropriate use of down-stream invasive coronary angiography following CTCA. Heart, 2016.

Acknowledgements: RCH Chest Pain Team, MAU team, ED team, Acute GP service and KCCG commissioning group

Mohammed.Abubakr@nhs.net

Declaration of conflict of interest: none