Nurse Initiated X-Ray (NIX) in the Rural ED

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How the issue was identified

• ED and Patient Flow Clinical Redesign diagnostic process in late 2011

• Time delays to Xray for minor injuries was one area identified for improvement
What was the issue?

Time delay to Xray for low acuity extremity injury

• Patients told of discontentment with long wait times and having to return for x-ray next day
• Medical imaging staff were frustrated with accumulation of x-ray at the close of business
• Nurses were frustrated that they could not expedite patient care
The Change Process

- Regular meetings set up with key stakeholders
- An audit undertaken of wait times
- Development of local policy and clear procedural guideline
- Implementation plan developed
- An education program developed
Project

Nurse Initiated Xray project commenced Jan 2012

Aim
• to reduce waiting times for patients presenting with isolated limb injuries
• improve patient satisfaction with early access to care
• improve staff satisfaction
  • Nurse ability to progress one client group
  • Avoid increase in Xray requests at 4.45pm
Distal Limb Injury Xray Requests

Total Xrays

- Jan-12: 788
- May-12: 827
- Jun-12: 885

Upper limb

- Jan-12: 86
- May-12: 80
- Jun-12: 91

Lower limb

- Jan-12: 93
- May-12: 75
- Jun-12: 80
Time to extremity Xray

Wait times for low acuity extremity Xray June 2012

Minutes to xray

0-59: 82
60-119: 44
120-179: 23
180-239: 2
240-299: 3
300-359: 2
360: 1
Appendix 2b - Medical Imaging Request Form Procedure

- Nurse generated referrals are not an accepted practice at any hospital within GSAHS except by a Nurse Practitioner within their designated area of expertise.
1st stage of trial

- Initial education was initially rolled out to senior ED nursing staff

- The NIX process then commenced
  - The NIX RNs recorded X-rays they ordered
  - Medical imaging staff reviewed each order
Consumer participation

• Patients at triage were informed of the project and verbal consent obtained for the process to continue

• Alternatively they were given the option to wait for a medical officer review
Results so far

- Evaluation
- Audit Dec 2012 / Jan 2013
  - NIX ordered 18 x-rays, 9 were fractured
  - Additional 8 extremity injuries NIX assessed – no Xray required
- Time to Xray has been significantly reduced
- No-one has declined the Nurse Initiated Xray
- Patient complaints decreased
What is next

• Progressing the implementation of NIX to all Triage RNs
• Progressing a Fast Track model
• Maintaining the multidisciplinary team collaborative processes
• Full evaluation of NIX project
• Extending the project to other sites
Thankyou

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