NHS
Technology Adoption Centre

Improving surgical outcomes for bladder cancer patients

Project overview

Three NHS hospitals implemented Photodynamic Analysis of Bladder Cancer (PDD) because of its potential to streamline major surgery for those suffering from bladder cancer, thus improving clinical outcomes, patient experience and quality of life.

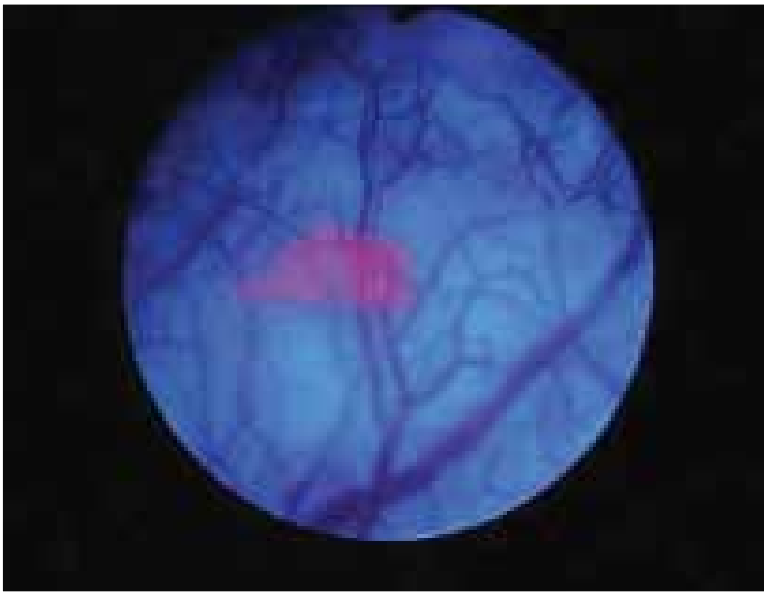
Project rationale

Cancer Research UK has recently reported that 10,090 people were diagnosed with bladder cancer in 2007, with 150,000 people worldwide dying from this illness in 2008. The demand on the NHS is growing, indicating the need to introduce more streamlined diagnostic services into the overall commissioning cycle to ensure efficiencies in cancer surgery can be achieved.

Over the past eight years, inpatient admissions for cancer have risen by 25% and bed days are rising by 1% per year, according to the Cancer Commissioning Toolkit (2008). Photodynamic Diagnosis (PDD) of bladder cancer, or fluorescence cystoscopy, assists in the diagnosis and treatment of non muscle invasive bladder cancer. It does this by helping to identify tumour that may otherwise have been missed using conventional white light cystoscopy.

"Inpatient days could be reduced by at least 20% . . . a potential efficiency gain of £190 million."

Cancer Reform Strategy (2010)



PDD allows a more thorough resection which results in less risk of leaving residual tumour, leading to a reduction of tumour seen during follow-up. Use of this technology has been shown to reduce the number of follow-up invasive procedures required for certain patients.

Project outcomes

Streamlining bladder surgery by introducing the PDD not only improves overall quality of life for patients, but can also further assist in reducing admissions and overall length of stay for bladder cancer patients. Introducing the procedure can also lead to a reduction in the on-going demands on healthcare services (e.g. adjuvant therapies can begin straight after initial surgery) and the wider socio-economic impact (such as the ability to work owing to a second surgical procedure). Therefore a more complete visualisation of tumour may also enable identification of disease at higher risk of recurrence or progression. This could enable more appropriate and timely treatment resulting in earlier placement of patients onto a more appropriate 'high risk' management pathway before the disease progresses.

This technology may play an important role in reducing overall morbidity and hospital length of stay for patients. It can play a significant part in ensuring that diagnostic services throughout the NHS are more productive while removing the risk in extra procedures that a delay in diagnosis can bring.

Decreasing the number of bed days as a result of implementing the diagnostic technique can help to achieve a vision set out in the Cancer Reform Strategy (2010). This advocates that more can be done to reduce the number of inpatient bed days. The Cancer Reform Strategy (2010) states that: "In-patient bed days could be reduced by at least 20%. If this level of reduction were achievable across the NHS, there would be a potential efficiency gain of about £190 million, representing approximately 8.1% of the cancer inpatient budget." (£2.332 billion in 2007/08. Source: HES analysis in the Cancer Commissioning Toolkit).

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