

## Insights on oral chemotherapy service redesign

First-hand experience from the Queen's Centre for Oncology and Haematology and the patient experience from the perspective of a colorectal Clinical Nurse Specialist at Royal Cornwall Hospitals NHS Trust.

For an oral chemotherapy service improvement toolkit visit: [www.orchestrate-online.co.uk](http://www.orchestrate-online.co.uk)

**The on-going focus on making efficiencies across the NHS means the challenge for clinicians and nurses to optimise services has never been greater. Although achieving improved patient care and service efficiencies with no cost impact seems like an insurmountable feat, service redesigns can be achieved, offering a number of advantages for the centre, staff and patients.**

### Have you thought about?

- The opportunity for change to be cost neutral
- Providing improved patient experience through reduced waiting times and greater continuity in patient follow-up
- Offering staff training and career development opportunities
- Creating a more relaxed clinical atmosphere

Here we look at the Queen's Centre for Oncology and Haematology at Castle Hill Hospital, Hull, East Yorkshire, which took advantage of the merger of three cancer services to successfully redesign their service, providing a more efficient oral chemotherapy centre without incurring any additional costs.

### The need for change

The amalgamation of the three services and the move to a purpose-built cancer centre three years ago resulted in a significant increase in both patient demand and capacity at the Queen's Centre for Oncology and Haematology. Previous service provision had varied dependent on the hospital and was not appropriate for the new cancer centre. Prior to the move and merger, most patients received IV chemotherapy, which could lead to long hospital visits. Added to this were the frequent complications of IV treatment that needed to be dealt with by clinicians and often required additional hospital resources to rectify. These factors, along with the dramatic increase in oral anti-cancer agents available for site specific purposes, highlighted the inequality of care between IV and oral chemotherapy patients, as detailed in the 2009 report from the National Chemotherapy Advisory Group; 'Chemotherapy Services in England: Ensuring quality and safety'.<sup>1</sup> A service redesign was seen as the best way to address the problem.

### Finding the right solution

Consultant Clinical Oncologists Dr Amandeep Singh Dhabra and Dr Rajarshi Roy had previous experience of oral chemotherapy services being delivered through nurse led

clinics and believed this approach offered an effective and efficient solution for the local population. Along with the support of Chemotherapy Nurse Specialist Mandi Elliott and the wider team, they set up a Chemotherapy Nurse Specialist-led oral chemotherapy service to meet the needs of patients. The Chemotherapy Nurse Specialist team used their collective experience with oral chemotherapies to deliver the service within this new setting.

### Making change happen

A business plan was developed and agreed based on the strength of the efficiencies and benefits offered through redesigning their service. The plan outlined how reducing IV chemotherapy and moving to an oral chemotherapy regimen, where appropriate, could help reduce related complications and reduce drug and associated administration costs. The redesign was cost neutral and was approved by the Trust's Clinical Governance Unit who sanctioned the new service. The team then developed protocols and pathways that were piloted over a one month period. The Clinical Nurse Specialist clinics were established in collaboration with existing pharmacy support and expertise.

### Increasing capacity

Explaining their rationale and impetus for implementing the chemotherapy service redesign, Dr Roy said: *'The service redesign was always about increasing the day unit capacity. Reducing the time pressures for all the healthcare professionals involved meant we could better deliver the chemotherapy service and improve the patient outcome and experience. Building a robust business case was key to our success, but we were also fortunate to have forward-thinking commissioners in the Trust.'*

Increasing the number of people able to prescribe supportive medication was another important step in relieving pressure on consultants and reducing patient waiting times. Two pharmacists and a chemotherapy nurse specialist underwent further training on the Department of Health's independent prescriber training scheme, allowing them to prescribe supportive, mostly nonproprietary medicines.



### Benefits of redesign

The service redesign for the Clinical Nurse Specialist oral agent assessment and support clinic was fully implemented within 12-18 months and has proven to offer many advantages. Oncologists now see eight less 'routine' patients per clinic, allowing them to spend more time with more complicated cases. Chemotherapy Nurse Specialists and pharmacists now have greater autonomy and responsibility in caring for the needs of patients and anecdotal evidence has suggested that there has been an increase in professional satisfaction among staff.

Most importantly, patients have benefited from:

- Fewer hospital visits
- Reduced waiting times
- Fewer complications as a result of being better informed about their treatment regimen

The centre now serves a catchment population of 1.25 million.<sup>2</sup> The cost neutral redesign has resulted in significant improvements for patients and staff simply by allowing resources to be re-allocated appropriately. Overall, the redesign demonstrates how patient and staff experience can be significantly improved without costing the NHS any additional money. Switching 50 per cent of eligible colorectal patients from an IV chemotherapy regimen to an oral chemotherapy cycle resulted in a reduction in drug acquisition and drug administration costs. The total number of necessary IV lines decreased, as did the number of associated complications requiring treatment. Anecdotally, this change generated estimated savings of around £2,000 per patient over six months of treatment.

### A colorectal CNS perspective

#### The Patient Experience

Improving the patient experience was one of the key drivers for change at the Royal Cornwall Hospitals NHS Trust. Clare Ferris, Colorectal Clinical Nurse Specialist, recognised the benefits of introducing a nurse-led clinic and implementing an oral chemotherapy service redesign. When Clare first joined the unit in 2003, oral chemotherapy was being introduced. However, patients were not pre-assessed by nurses and lacked a thorough understanding of their treatment. They were also often unaware of the potential side effects of treatment and there was no point of contact for them to call. This resulted in over compliance or poor compliance which sometimes led to hospital readmission.

#### Benefits of a nurse-led clinic

Clare realised that a nurse-led clinic could benefit both patients and healthcare professionals. After the cost neutral redesign was approved by the cancer centre manager, oncology pharmacist, lead cancer nurse and clinical and medical oncologists, Clare trained as a nurse prescriber to facilitate the successful implementation of the service redesign. Now, eight years later, the service is an efficient, streamlined one-stop shop for oral chemotherapy patients. The redesign has allowed for informed and empowered patients who receive information on understanding and managing their treatment and its potential side effects. Patients are now also assisted through telephone support if needed.

#### Creating a positive patient experience

*Clare explained: 'Now when patients visit the service they benefit from continuity of care, seeing the same member of staff at each visit allows treatment to be managed more closely and consistently. Patients also benefit from hospital appointments that are swifter and less frequent, with patients spending less time travelling to and from hospital and less time in the clinic when they do attend.'*

*'Pharmacists can make up a patient's prescription in advance of their clinic appointment, again reducing patient waiting times. All of these changes have had an obvious positive impact not only on the patients' treatment regimen, but also on their overall quality of life. Our most recent survey found that none of the patients attending felt they had to wait long to see the nurse, and most positively, that 100% of patients were satisfied with the nurse-led clinic and happy to receive their chemotherapy treatment prescription from the nurse.'*

**For more information about how best to develop and implement a service redesign plan, Roche has created, alongside a faculty of senior healthcare professionals in oncology, an oral chemotherapy service improvement toolkit which can be accessed at [www.orchestrate-online.co.uk](http://www.orchestrate-online.co.uk)**

Roche Products Ltd has developed this article following interviews with healthcare professionals on their involvement in the redesign of their hospital chemotherapy services. The content of this article has been written by Roche and is an accurate reflection of the views of the healthcare professionals involved. The placement of the article has been paid for by Roche.

#### References

1. NCAG Chemotherapy Services in England: Ensuring Quality and Safety, 2009
2. Hull and East Yorkshire Hospitals NHS Trust, Quality Achievements 2010/2011

