Slough CCG

Using assistive technology to help to increase efficiency, and promote self-management and prevention amongst high risk groups

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The setting

Slough Borough Council and NHS Slough CCG. NHS Slough CCG is responsible for commissioning health services for its population of approximately 150,000 registered with one of its 16 GP practices.

The situation or problem

The CCG had identified a cohort of patients that were high users of health and care services. These patients were well known to the specialist community practitioners and the acute Trust.

Slough Borough Council and NHS Slough CCG wished to improve both the quality and value for money of services for their population. Anecdotal evidence from Community Nurses highlight increased levels of anxiety amongst patients living at home with multiple long-term conditions. This resulted in heavy use of resources in the form of high numbers of house calls, lengthy telephone conversations and non-elective admissions.

What action was taken?

The organisations employed the NHS RightCare methodology (Where to look; what to change; how to change) to determine the best use of this funding

1. **Where to Look**

   Analysis of the Slough CCG patient population demonstrated that 5% (7,500) consume 43% of financial resources. There are currently up to 150,000 adult patients registered with a Slough GP of which 1545 are diagnosed with Chronic Pulmonary Obstructive Disease and 3809 diagnosed with Chronic Heart Failure. It has been shown that these long-term conditions rarely exist in isolation and more than 50% of patients have three additional chronic conditions to manage.

2. **What to Change**

   Analysis of hospital activity identified a cohort of individuals who were high users of resources in terms of A&E attendances, non-elective hospital admissions and out-patient appointments. A sub-cohort was living in the community with multiple long-term conditions in combination with either heart failure (CHF) and/or chronic obstructive pulmonary disease (COPD).

3. **How to Change**

   A task and finish group was established to consider how assistive technology might help to increase efficiency, and promote self-management and prevention amongst high risk groups. Slough Borough Council and the CCG commissioned a one year pilot study, funded through the Better Care Fund, to trial up to 15 telehealth devices across Slough for patients with multiple long-term conditions in combination with either heart failure (CHF) and/or chronic obstructive pulmonary disease (COPD).

   The key objectives of the project were:

   1. To promote the confidence and independence of patients and their carers, giving them a better quality of life
   2. To reduce the number of non-elective hospital admissions, A&E attendances and outpatient appointments and hence reduce spend.
   3. To deliver customer satisfaction in the use of a new model of care.

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1 NHS RightCare Case Study 2016
NHS Slough CCG - Developing a Complex Care Management Service within Primary Care
What happened as a result?

The pilot telehealth service was designed and delivered as a result of collaboration between local clinicians and the provider of the telehealth service.

Patients selected for the pilot study of the telehealth service had a confirmed diagnosis of COPD and/or CHF AND fulfilled the first and at least one of the following inclusion criteria:

- Patients who have had 1 or more emergency unplanned admissions due to COPD in the last 12 months AND who are deemed at risk of having an unplanned admission based on local knowledge or risk stratification tool.
- Patients admitted to hospital or seen in A&E, Emergency Assessment Unit or Acute Medical Unit due to their condition twice or more within the last 12 months.
- Patients requiring support with optimisation of their medication (e.g. following a dosage change or introduction of a new drug).
- Patients with high anxiety levels who utilise medical services significantly more than expected as a result.
- Patients who frequently access GP services, community nursing teams, the Out of Hours services or the Emergency services because of their condition (minimum of 5 times in the last 12 months)

Exclusion Criteria
- Patients not registered with a Slough GP,
- Patients under the age of 18 years

Fourteen patients who met the criteria for inclusion were recruited to the pilot study. Data relating to their non-elective admissions, A&E attendances, day case admissions, outpatient appointments and outpatient follow-ups were extracted for the 6 months prior to the start of the pilot study and the same data collected for the 6 months following the commencement of the pilot study.

Initially local Community Matrons and other clinicians provided:
- The initial identification of patients who met the criteria for inclusion in the study - this was based on the inclusion criteria plus personal knowledge of the patient and their wellbeing
- Design of the decision-making processes to be followed – this included the referral form, turnaround times, measures of success and criteria for safe discharge
- Supply of individual care plans for each patient based on their clinical knowledge and skills as well as their personal knowledge of each case.
- Agreed thresholds for vital signs outside of which alerts should be raised - these thresholds were agreed at an individual level based on the person’s care plan and medical history
- Communication mechanisms for each patient in the event of an emergency, either in terms of their condition or with equipment problems

The service delivered by the telehealth provider included:

- Supply of Telehealth Pods with associated peripherals for COPD/CHF monitoring including:
  - Blood Pressure/Pulse
  - Coagulometer
  - Digital Thermometer
• Glucometer
• Weighing Scales
• Pulse oximeter
• Clinical case management of patient readings between 09-00 and 17.00 Monday to Friday and, if they are outside of the defined tolerances, to raise an alert in line with agreed plans
• Technical support to users between 09-00 and 17.00 Monday to Friday
• Training and installation for users
• Training for practitioners in identification and remote monitoring
• Development of secure network to share case management details
• Monitoring of key performance indicators and baselines

Outcomes from the pilot study

1. Reduction in acute activity

During the 6 months of the pilot study, there were reductions in A&E attendances, non-elective admissions and out-patient appointments.

2. Overall reduction in costs

As would be expected for patients with long term and complex conditions, the outcomes for individual patients were quite variable as these patients will not be cured and many will therefore continue to require hospital visits. However, overall there were significant financial savings. The cost of acute activity for these 14 patients was £46,873 in the 6 months of the telehealth installation compared with £61,520 for the prior 6 months.

The following graph shows the costs for the 14 individual patients in the 6 months pre telehealth compared with post installation.
3. **Improved Quality of Service**

Patients and their carers benefitted from the new service for a number of reasons:

- They had increased confidence in understanding their own condition
- This gave them increased independence
- Patients have taken control over their lifestyles in response to their own data (e.g. smoking cessation/weight loss)
- They developed improved relationships with the community team
- Responses to a patient satisfaction survey demonstrated that:
  - 100% agreed the telehealth equipment is easy to use
  - 100% agreed telehealth fits within daily routine
  - 83% are confident in taking their readings and viewing the results
  - 83% agree that Telehealth is tailored around their condition
  - 100% review the history function to review their records
  - 86% have taken their telehealth readings to their GP appointments
  - 50% state that telehealth have helped them become more involved in their healthcare
  - 83% agree that Telehealth helped to improve their health
  - 66% state that telehealth has helped them to better manage their condition
  - 66% state that telehealth has helped them to understand their condition

4. **Increased capacity in the Community Matron Service**

During the 6 month trial the clinicians in the Provider Clinical Triage Team took over 280 phone calls which would otherwise have been directed to community services, GP or ambulance service. This reduced the number of community matron visits required by 50%.

**Next Steps**

The CCG and Local Authority are going out to tender for a full service and will expand this incrementally to ensure that the quality of the service provided can be maintained.

**Lessons Learned**

1. The NHS RightCare methodology can be applied to identify cohorts amenable to new service models
2. Partnership engagement, meticulous planning and implementation has contributed to the success of this project
3. Throughout the project there was clear engagement from the Clinical Lead, Community Matrons and the patients and their carers on the expected outcomes and deliverables of the project.
4. The development of referral and escalation pathways has allowed for trust in the clinical administration of the Provider as well as increased capacity in the Community.
5. The importance of piloting small-scale innovation in order to develop the evidence base for expansion
Right Care Resource Centre

Right Care has a resource centre where CCGs can find supporting materials describing the Commissioning for Value approach:

- Online learning videos
- Atlases, Spend and Outcome Tools
- Commissioning for Value tools
- Casebooks showing learning from early adopters
- Essential reading lists and glossary

www.rightcare.nhs.uk/resourcecentre