BACKGROUND

The advent of directly acting anti-viral agents (DAAs) for HCV infection has transformed the therapeutic landscape. Unlike historical treatment for HCV, DAAs have an excellent safety record, and can therefore be stratified for use in community environments which better meet patient needs. We present a pilot study of a novel home based care pathway, delivered by partnership between specialist hepatitis services and Hospital Pharmacy.

METHODS

HCV infected individuals managed by hospital based services in Nottingham and assessed as eligible for DAAs were screened for entry to the service using the following criteria: competence to adhere to therapy and blood testing without direct supervision; no current or documented evidence of decompensated liver disease; contactable by telephone. Following recruitment, patients received a pack containing: blood forms; a schedule of blood testing (performed in the community); information leaflets; details of hospital contacts. DAAs were delivered to the patient home each month by Hospital Pharmacy. A dedicated Homecare technician (0.6 WTE) is the initial contact for patient queries, with support from the lead nurse. Patients were invited to report outcome measures and feedback using structured questionnaires.

The service is run by Outpatient Pharmacy at Nottingham University Hospitals. The Homecare Technician attends weekly MDTs and works closely with the nursing team, the MDT coordinator and ODN lead to coordinate the service. Lab results are reviewed by the lead nurse and clinical problems are referred to the clinical team. This integration facilitates good communication and the delivery of effective patient care.

The Homecare service and strategy of pharmacy based delivery relieves pressure on the hepatitis services, and allows specialist teams to focus on patients with severe co-morbidities, and to develop and promote models of community care for hard to reach groups with HCV infection. As an example, we produced a stand for World Hepatitis Day, allowing us to spread awareness of easy access to phlebotomy for same day testing.

FINDINGS

Of 121 patients offered a choice of care setting between November 2016 and January 2018, 97 (80%) elected to receive Homecare. This group did not differ significantly in age, gender or HCV genotype from the hospital based population, and there were no restrictions on choice of DAA. 8 Homecare patients met Fibroscan criteria for cirrhosis. Since the implementation of the Homecare service 116 patients have so far started treatment, of whom 89 have completed and 45 have reached 12 weeks post treatment. Of these, 43 have achieved SVR (96%) and 2 did not respond (4%). One patient withdrew from the study for reasons unrelated to Homecare and one transferred back to hospital care. While the numbers of patients treated remains a function of NHSE ‘run rate’, Homecare has supported a shift within the HCV service from secondary care settings to treatment in the community. Travel difficulties was the most frequently cited reason for homecare patients offered a choice of care setting between November 2016 and January 2018, 97 (80%) elected to receive Homecare. This group did not differ significantly in age, gender or HCV genotype from the hospital based population, and there were no restrictions on choice of DAA. 8 Homecare patients met Fibroscan criteria for cirrhosis. Since the implementation of the Homecare service 116 patients have so far started treatment, of whom 89 have completed and 45 have reached 12 weeks post treatment. Of these, 43 have achieved SVR (96%) and 2 did not respond (4%). One patient withdrew from the study for reasons unrelated to Homecare and one transferred back to hospital care. While the numbers of patients treated remains a function of NHSE ‘run rate’, Homecare has supported a shift within the HCV service from secondary care settings to treatment in the community. Travel difficulties was the most frequently cited reason for homecare.

Of 121 patients offered a choice of care setting between November 2016 and January 2018, 97 (80%) elected to receive Homecare. This group did not differ significantly in age, gender or HCV genotype from the hospital based population, and there were no restrictions on choice of DAA. 8 Homecare patients met Fibroscan criteria for cirrhosis. Since the implementation of the Homecare service 116 patients have so far started treatment, of whom 89 have completed and 45 have reached 12 weeks post treatment. Of these, 43 have achieved SVR (96%) and 2 did not respond (4%). One patient withdrew from the study for reasons unrelated to Homecare and one transferred back to hospital care. While the numbers of patients treated remains a function of NHSE ‘run rate’, Homecare has supported a shift within the HCV service from secondary care settings to treatment in the community. Travel difficulties was the most frequently cited reason for homecare.

FEEDBACK

Questionnaires have been sent out to all of our patients after completing treatment. We had a 27% response rate to our feedback forms. All feedback forms received to date show positive feedback:

<table>
<thead>
<tr>
<th>Feedback</th>
<th>Definitely</th>
<th>Yes to some extent</th>
<th>Not really</th>
<th>Definitely not</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall, did the service provide what you anticipated?</td>
<td>24</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Overall, did you feel confident in the member of staff looking after you?</td>
<td>24</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Would you recommend the service to another patient?</td>
<td>23</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Was all relevant information explained clearly to you?</td>
<td>20</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Some free-text quotes from patient feedback forms:

- “The service went very well and no need for improvement (very ,very good)”
- “Thank you very so much for making me good”
- “All excellent, very happy”
- “I would like to add that the delivery home service was always great with a happy enthusiastic gentleman. Also the help from my virologist nurse Jasmina – she has gone over and above helping me. I couldn’t be happier with the service and constant contact.”

Feedback from Pharmacy

“Overall, the system we have works extremely well and the gratitude we have had from patients proves its effectiveness. It has been a great pleasure working with the Hepatology department and being involved with such a rewarding service.” - Samantha Bird, Homecare and Pharmacy Technician.

Feedback from Specialist Virology Nurse:

“It was time to change our strategy in how we deliver Hep C treatment and Nottingham was given this wonderful opportunity to offer homecare treatment to our patients. This model of care has given a chance to those patients that are the most difficult to reach access treatment, where they otherwise wouldn’t. It has been a huge success, I am immensely proud to be part of this service.” - Jasmina Khalidi, Specialist Virology Nurse, Nottingham University Hospitals NHS Trust

FINANCIAL SAVINGS

AVERAGE SAVING PER PATIENT VS SECONDARY CARE: £218

Other costs per year:

Homecare coordinator: £15940
Number of patients needing to be treated a month via Homecare rather than secondary care to cover cost of coordinator: = 6 (E15940/Saving).

Homecare coordinator can treat up to 15 patients a month on average.