

# ILUMIN: The Leg Ulcer Quality Improvement Programme

Summary Report



## Working in collaboration with:



**Manchester University**  
NHS Foundation Trust

This study/project is funded by the National Institute for Health Research (NIHR) Collaboration for Leadership of Applied Health Research and Care Greater Manchester. The views expressed are those of the author(s) and not necessarily those of the NIHR or the Department of Health and Social Care

## Key messages

- The management of complex wounds is a significant yet often neglected area of care in the NHS.
- A region wide survey of complex wound care by NIHR CLAHRC Greater Manchester revealed a number of opportunities where care could be enhanced particularly for patients with leg ulcers.
- Working in partnership with Central MFT and other Trusts, the Leg Ulcer Quality Improvement Programme (ILUMIN) team designed an evidence-based improvement strategy focused on enhancing the delivery of the three evidence-based quality standards for leg ulcer management.
- Using a facilitated audit and feedback approach ILUMIN supported community nursing teams make changes to practice, enhancing the quality of patient care delivered.

## Context

The management of complex wounds is a significant yet often neglected area of care in the NHS. At any time, around 80,000 people have one or more complex wound including wounds like foot, leg and pressure ulcers. The impact on NHS resources of managing wounds is substantial.

In 2015/16, NIHR CLAHRC Greater Manchester conducted a region wide survey of complex wound care. The survey highlighted a number of opportunities where wound care could be enhanced for patients particularly for those with leg ulcers - the most common type of complex wound found to be treated in the community.

Working in partnership with Central MFT and other partner Trusts, the Leg Ulcer Quality Improvement Programme (ILUMIN) team designed an improvement strategy to enhance the delivery of the three evidence-based quality standards for leg ulcer management. The three quality standards agreed with participating Trusts were:

1. Measurement and recording of ankle-brachial pressure index (ABPI). Across all participating Trusts, 57% of people with a leg ulcer had an ABPI recorded in their notes (53% in Central MFT).
2. Use of (any) compression therapy, where clinically appropriate. Across all participating Trusts, 63% of people were recorded as being treated with any compression (47% in Central MFT). In addition, the level of compression used was also monitored.
3. Use of high compression two-layer hosiery kits, where clinically appropriate. Despite being both effective and cost effective, only 2% of patients were recorded as receiving the treatment across the region (no recorded use in Central MFT).

## The improvement project

Four community teams (including treatment rooms and district nurses) across Central MFT were asked to complete a form for every patient on their caseload that had an active leg ulcer or a lower limb wound at risk of ulceration. Any changes in patient's status (e.g. had an ABPI recorded, change in number or diagnosis of ulcer(s) or change in type of compression) were logged over the duration of the project.

At the end of each month the designated 'Leg Ulcer Champion' for each team would send data to the CLAHRC team who would process it and return a summary of performance against the three quality standards. CLAHRC facilitators also provided

the teams with initial training and ongoing remote and face to face support throughout the data collection periods.

The original intention was for Central MFT teams to undertake 12 months of continuous data collection but it was decided to continue for the duration of the project. In total, data were collected for 20 months from November 2017 to June 2019.

Alongside the facilitated audit and feedback intervention, a series of educational workshops were offered as part of the project. The aim of the workshops was to assist teams in understanding their performance in relation to the quality markers, and to provide opportunity to understand areas for improvement and identify potential changes that could be made. Workshops were to be facilitated by the CLAHRC team with any clinical training provided by internal staff.

In Central MFT, it was not possible to offer the workshops as intended. Instead, Harm Free Care meetings were utilised where performance was discussed against the quality standards. An additional session was delivered to focus on specific clinical practice. Workshops were facilitated by the CLAHRC team with clinical practice training provided by Julie Mullings, Lead Nurse Tissue Viability, Infection Prevention (South MFT).

## **Improvements against three evidence-based quality standards**

Over the course of the project, all four community nursing teams in Central MFT participated in data collection. Due to staffing issues some of the teams had more trouble returning data than others and as a result some months' data collection were missed, particularly for Gorton & Levenshulme (see Figure 1).

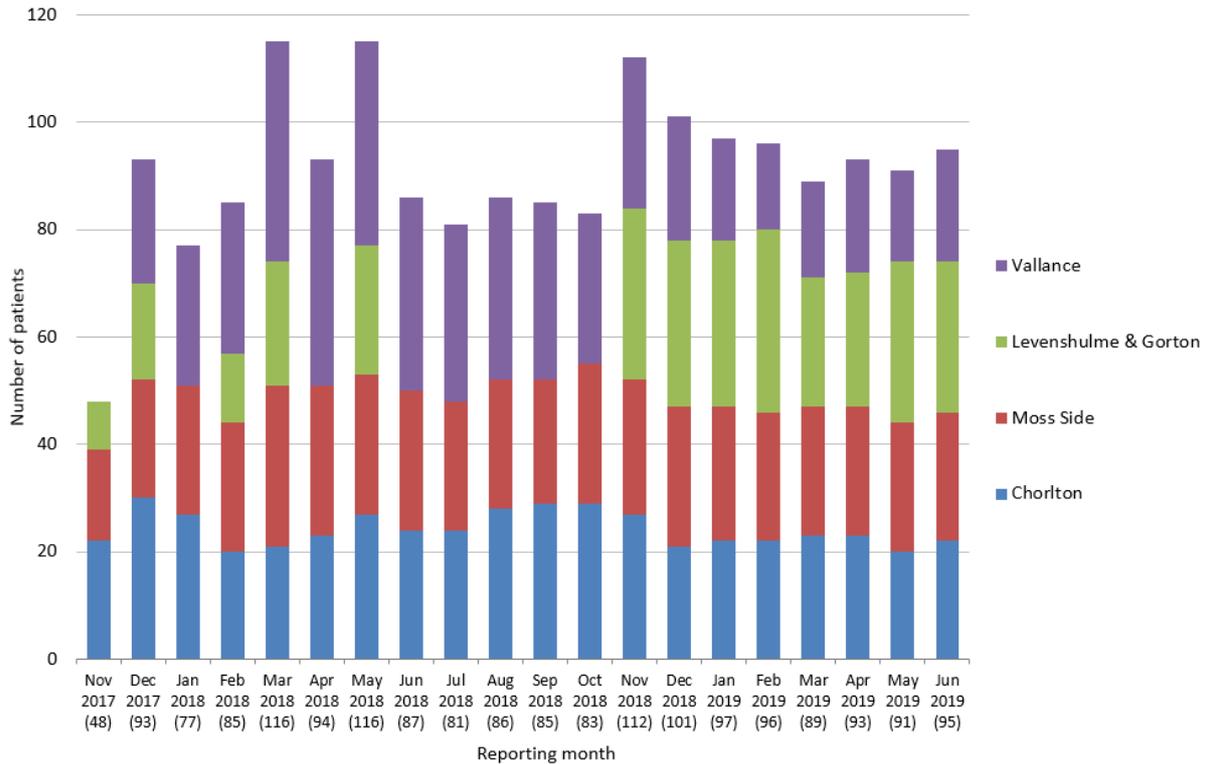


Figure 1. Number of patients reported by Central MFT teams November 2017 to June 2019

The data returned provided information on approximately 270 patients being treated for 380 leg ulcers.

1. Timely (within 21 days) measurement and recording of ankle-brachial pressure index (ABPI)

Across participating teams, there was a general increase in the proportion of patients who had an ABPI recorded (Figure 2). Figure 3 illustrates whether patients had an ABPI recorded within 21 days of first seen. As there are so few patients due an ABPI each month it difficult to ascertain wherever any clear pattern emerges as a result of the ILUMIN data collection.

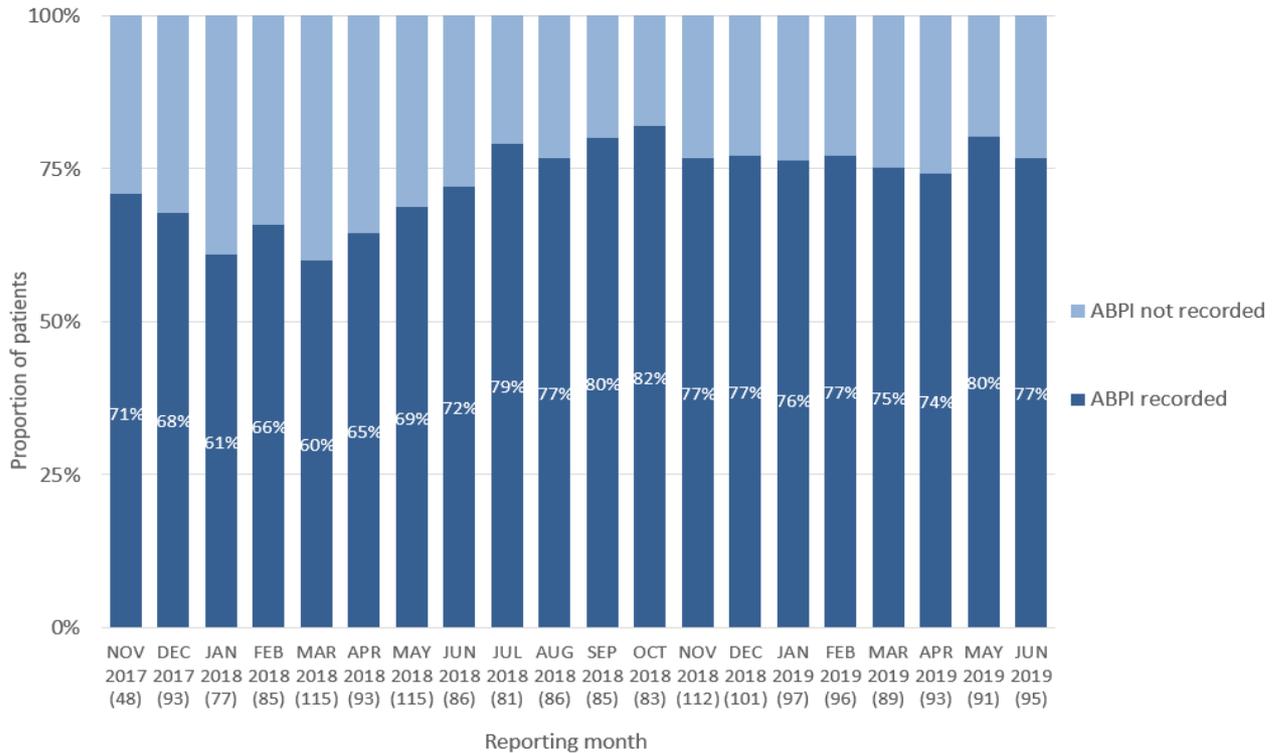


Figure 2. Proportion of patients with an ABPI recorded. Central MFT teams November 2017 to June 2019

Figure 4 uses the data provided for each patient which gives the date that the ABPI assessment was carried out. This can be used to assess the proportion of patients that are yet to have an ABPI assessment at a certain time point. This analyses show that for Central MFT it took 120 days for 50% of patients to have had an ABPI assessment whereas for South MFT this figure was much lower, and only took 25 days from the date the patient was first seen.

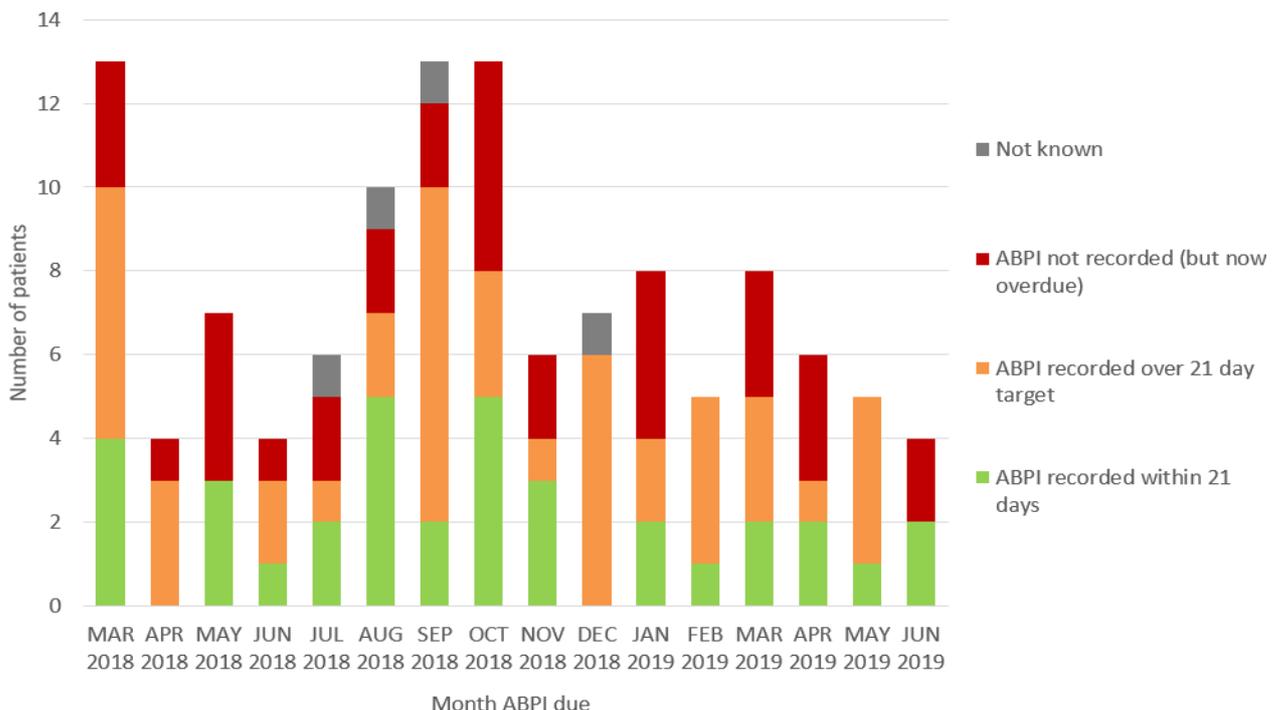


Figure 3. Number of patients with an ABPI recorded within 21 days of first seen. Central MFT teams November 2017 to June 2019

Figure 4. Survival analysis showing the number of days taken for a proportion of people to have an ABPI. Central and South MFT November 2017 and October 2018 to June 2019

## 2. Use of (any) compression therapy, where clinically appropriate

Across the four Central MFT teams, the proportion of patients (56% overall) in any form of compression has remained fairly consistent (Figure 5). There was a general increase to October 2018 but then the proportions fall slightly. This is likely due to the Gorton & Levenshulme teams returning to active participation in November 2018. Figure 6 shows the comparative results for South MFT; overall 69% of patients were being treated with some form of compression over the shorter study period of nine months.

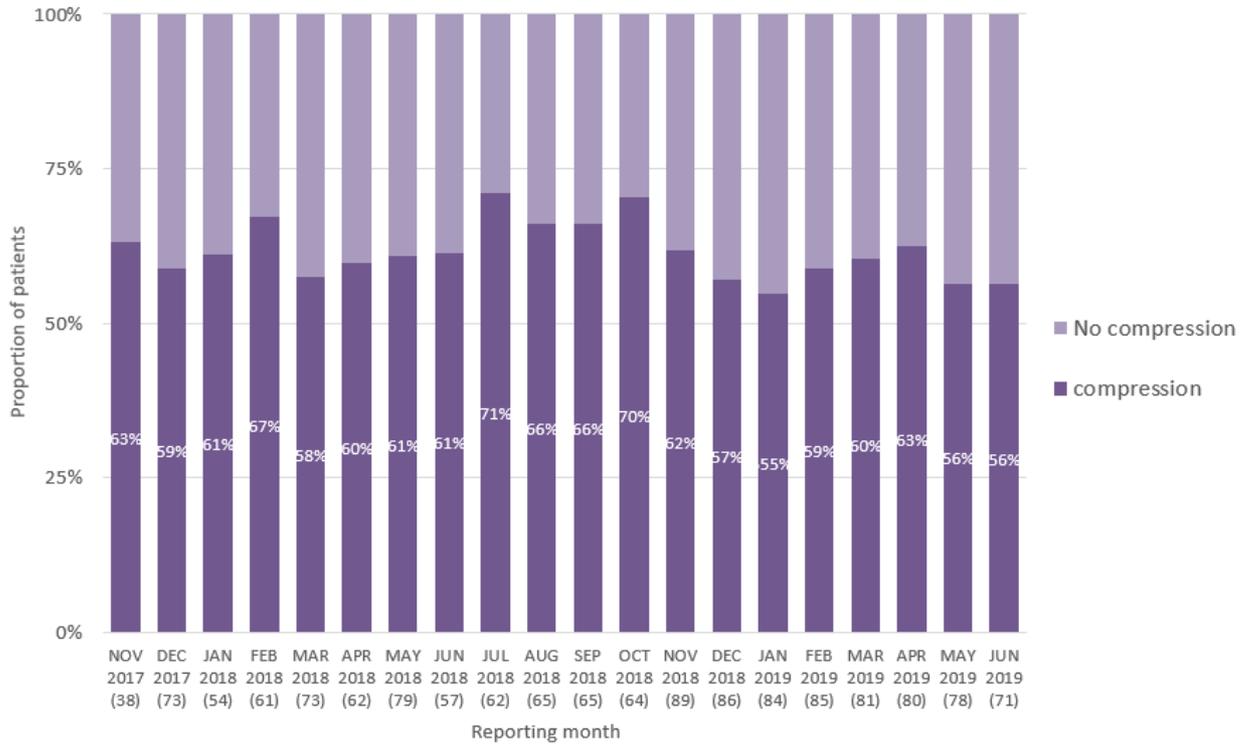


Figure 5. Proportion of patients (56% overall) with ulcers specified as venous or mixed aetiology being treated with some form of compression. Central MFT teams November 2017 to June 2019

There has been however, a general increase in the proportion of patients that are in compression being treated with full compression for both Central and South MFT(as opposed to a reduced form of compression) (Figures 7 & 8). This may be in part to practice change. For example, Vallance reported that they used to always put patients in reduced compression first before trying to build up to full. Now they have switched to starting with full compression and only reducing if patients can't tolerate the higher level.

Figure 6. Proportion of patients (69% overall) with ulcers specified as venous or mixed aetiology being treated with some form of compression. South MFT home visits October 2018 to June 2019

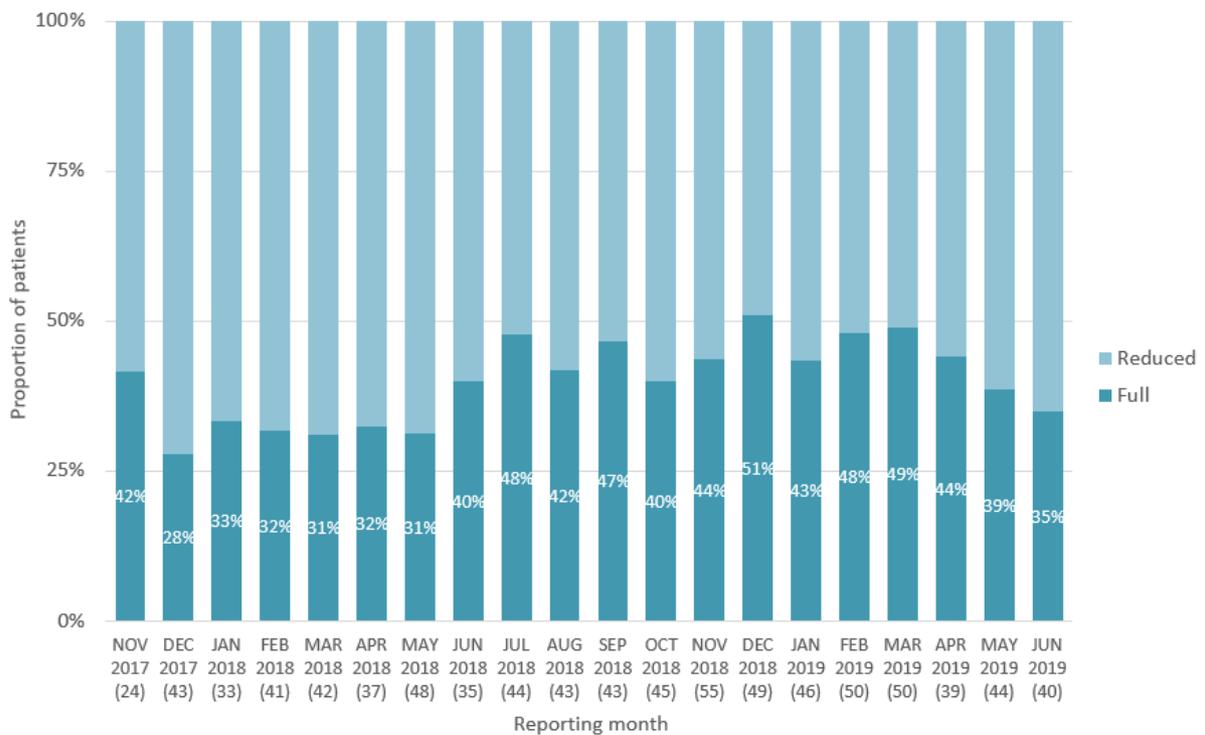


Figure 7. Proportion of patients (33% overall) with ulcers specified as venous or mixed aetiology in compression being treated with full compression. Central MFT teams November 2017 to June 2019

Figure 8. Proportion of patients (29% overall) with ulcers specified as venous or mixed aetiology in compression being treated with full compression. South MFT home visits October 2018 to June 2019

3. Use of high compression two-layer hosiery kits, where clinically appropriate

The 2015/16 region wide wound care revealed there was no reported use of two-layer hosiery kits in Central or South MFT. Despite being a cost effective treatment in appropriate patients, two-layer hosiery kits were rarely reported as used during the course of data collection. Most reported use was by the Moss Side team (Figure 9). South MFT district nurses only reported one patient being treated with a two-layer hosiery kit over the nine month period of data collection.

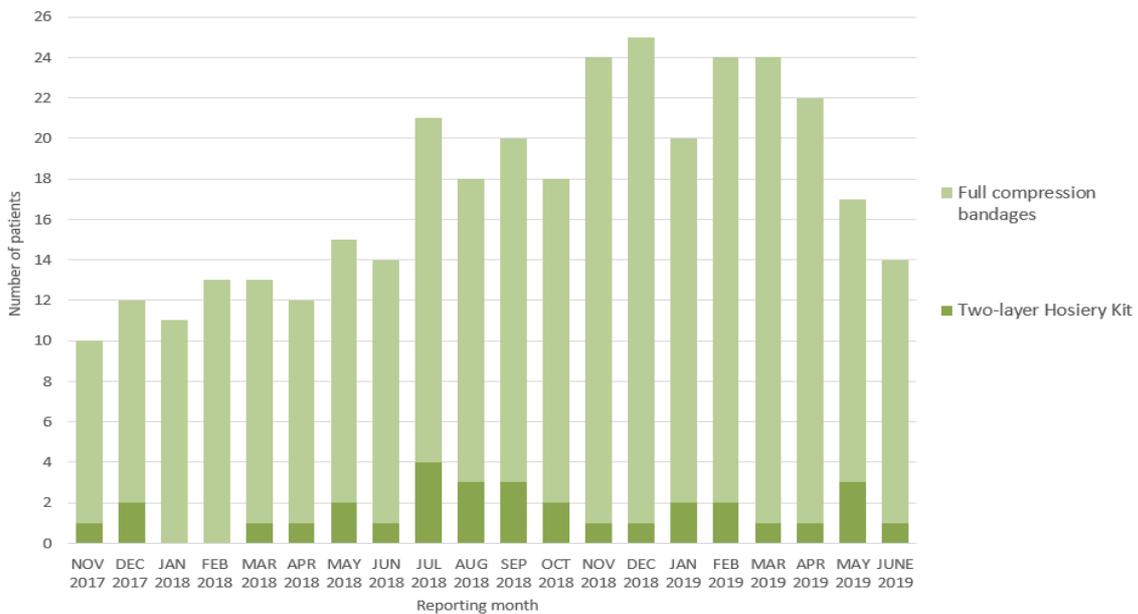


Figure 9. Number of patients with ulcers specified as venous or mixed aetiology in full compression being treated with two-layer hosiery kits. Central MFT teams November 2017 to June 2019

## Conclusions

The ILUMIN project has shown that a facilitated audit and feedback approach combined with educational outreach can help community nurses make changes to practice and enhance the quality of patient care delivered.

ILUMIN has identified key core enabling ingredients that may aid future implementation elsewhere. These include:

- The need for formal and informal leadership support for improvement activity within and across the organisation.
- The need to provide support and adapt data collection to local needs. Facilitators can be internal or external but should be trained to support others to change and set up the processes to sustain improvements locally.
- The need to create regular opportunities for education and shared learning provided by trusted and credible sources. For ILUMIN, this includes providing space for staff to understand areas for improvement and to reinforce the importance of timely treatment and optimal compression management.

The project has also highlighted potential challenges to optimal treatment. Issues relating to how services are organised, staffed and resourced, the nature and frequency training and patient non-concordance were highlighted. As many issues were service related, this information can be used to inform future improvement efforts locally.

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Produced by Collaboration for Leadership in Applied Health Research and Care Greater  
Manchester, September 2019.  
The information in this report/brochure is correct at the time of printing.