Evaluating the “Hospital to Home” pathway for children on long term ventilation via tracheostomy (tr-LTV).

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We have developed an innovative, web based, decision support tool to enable a more efficient discharge process for tr-LTV children. The pathway is supported by a central hub that includes specialist clinicians and professionals experienced in social care (housing and welfare advice) and pathway and process management. The web based pathway incorporates workflow tools to assist clinicians in managing the hospital discharge as well as creating a central resource for shared best practice within a network that now extends throughout NHS England.

To report total hospital length of stay (LOS), including proportion of time medically ‘unstable’ versus ‘stable’ (i.e. fit for discharge from hospital) during a period of service development and initiation of a workflow driven discharge process.

We reviewed LOS data for children requiring a complex home care package (equipment, trained staff and suitable house) between 1 April 2006 and 31 March 2014. Data was analysed by date of discharge as follows:
2006-2008: baseline sample
2008-2010: clinical pathway described and single nurse practitioner
2010-2012: expansion of outreach service to provide education and structured discharge pathway management
2012-2014: implementation of web based pathway and expansion of integrated care service to include pathway management and welfare/housing expertise

The hospital LOS of all 82 tr-LTV patients within the timeframes is shown in Figure 1.

The total hospital stay per patient significantly reduced during the service development period and by 2012-14 the LOS was less than half of baseline values.

In addition the time the child was medically stable fell as a proportion of total stay (from 49% to 33%).

Applying average bed day costs of £1500 per patient demonstrates a reduction in cost from £915,000 per patient (baseline) to £251,000 per patient (2012-14).

Greater efficiency in hospital discharge of tr-LTV patients can be achieved by integrating non-clinical experts (with process management, housing and welfare expertise) within a clinical service. IT enabled discharge management improves efficiency and supports better communication by enabling information sharing on a central platform and capture of performance data.

The hospital to home platform is now shared throughout NHS England with 76 referrals from 23 hospitals since April 2014. Our aim is to continue to grow the national network and provide a central forum for clinical teams to share best practice and improve the experience of the tr-LTV child and their family.

References