

**UTILISATION OF A QUALITY IMPROVEMENT PROCESS  
(LEAN PRINCIPLES) WITHIN THE  
DELIVERY OF THE HEALTHY CHILD PROGRAMME**

**Revision of the delivery of The Healthy Child Programme in  
Middlesbrough and Redcar & Cleveland**

**February 2012**

**Fiona Oliver  
Health Visiting & School Nursing Service  
Community Division  
South Tees Hospitals NHS Foundation Trust**

---

## **Purpose of Document**

This case study focuses on an improvement in service quality, innovation or a new way of working, specifically along one or more of the strands of the health visiting service vision and family offer

**Community  
Universal  
Universal Plus and  
Universal Partnership Plus**

---

## **Brief Description of Case Study**

This project was led by a team approach of health visitors, community nursery nurse and clerical assistants who employed the principles of LEAN management to examine how effective the delivery of the Healthy Child Programme 0-5 (HCP) pathway was within Middlesbrough initially, before sharing the re-design with Redcar & Cleveland.

The principles of LEAN are a quality improvement process, which have been transferred from use within the private sector into the public sector. LEAN is based upon five core principles:

1. Specify the value
2. Identify the value stream
3. Make the process & value flow
4. Let the customer pull
5. Pursue perfection

The team were supported to utilise the above principles which enabled them to explore the core service that the team delivered and how it could be improved. The process of LEAN seeks to improve patient care, eliminate delays, save time, reduce costs and reduce uncertainty because everyone is aware of their roles and responsibilities.

As a team, we had been delivering the HCP as a universal service to the children and their families within our locality. As a team we were offering health reviews to children and their families at 9 months, 2 years, and at 3 years of age. We were sending out a questionnaire to parents and asking them to complete and return it to ourselves. We identified that the review appointment at 9 months and two years were performing well. But the 3-year questionnaire process was not effective in that it was a very lengthy process, requiring large amounts of time from the clerical, community nursery nurses and health visitors, the return rate of the questionnaires was not very high, there were a number of 'bottle necks' within the process and the monthly process was invariably never completed.

As a team, we decided to review the 3-year process to improve the service that we offered to children and their families. We identified that The Healthy Child

Programme did not stipulate that a specific contact or review needed to take place at 3 years, but that for children between 3 and 5 years, a range of support and health promotion should be available to families as appropriate (with routine immunisations being due at between 3 years 4 months, and 3 years 6 months).

As a result, we decided to ask parents within the locality their views about the questionnaires. The feedback from the parents confirmed that they did not value the questionnaire.

We engaged with the local school nurseries to identify what assessments they undertake on new starters into nursery at the age of 3 years. All the nurseries undertake an initial assessment of each child as they enter nursery so they can monitor and review a child's progress until they leave nursery and commence full time school. This confirmed that the 3-year review was a duplication of the review undertaken by the school nurseries.

As a team, we considered all the information that we had accrued. It was felt that the 3-year questionnaire process was not worthwhile as it was a time consuming process, was not valued by the clients, was duplicated by the school nursery assessments and was not identified as essential within the HCP.

We decided to cease the 3-year questionnaire process and instead offer a school nursery drop-in to parents at drop off and pick up times every half to full term, depending on need. We engaged with the school nursery staff, with the offer of a nursery drop in and what this offered to both parents and staff at the nursery. All school nurseries within the locality took up the option of having a drop-in established by our team.

Using a team approach, initially a health visitor was allocated to each nursery, and then this was delegated to the staff nurse and community nursery nurses to continue. All contacts made within the drop-ins are recorded in the child's health record. This established valuable and effective communication links with the staff within the nurseries. Parents actively attend the drop-ins with appropriate needs that we are able to respond to. From the team's perspective the nursery drop-in has a number of key benefits, including:

- better use of staff time
- better take up by parents
- effective opportunity to assess appropriate needs for those children requiring intervention
- increased partnership working with the nursery school staff
- removes duplication from different services and
- offers the team more job satisfaction.

The team will review the drop-ins through auditing the number of parents accessing the sessions, the health needs identified, the number of referrals made and the work undertaken by the team.

---

## Challenges

- The initial challenge was commencing the project. The numbers of safeguarding children were increasing in Middlesbrough and the health visitors workloads reflected this. Amongst the health visitors the perception was that they did not have the spare capacity to explore how the pathway was being delivered.
- One of the health visiting teams 'looked outside of the box' and volunteered to undertake the project, supported by their colleagues who covered work. The clinical lead of the team provided the enthusiasm and motivation that as a team they could influence and improve how they deliver the pathway for the benefit of the children and their families. The team quickly gained momentum when the project commenced, and the lean process enabled the team to identify how inefficient some areas of the pathway were.
- Any re-design of the pathway locally required the 'buy in' of the health visiting service as a whole, for the re-design to be implemented and for the potential benefits to be realised.
- The team regularly gave updates to their colleagues in their locality team as to their progress and findings to date. By utilising the Lean process, some perceptions Health Visitors held were found not to be confirmed in practice. For example, within the team, the time with clients over a two week period amounted to 30 percent of a health visitors time. All staff were amazed that the percentage was this low.
- Following the completion of the project, the team gave presentations to all the locality teams within Middlesbrough, Redcar and Cleveland. The locality managers for the health visiting service endorsed the findings of the project and the revised pathway was implemented across the South Tees area.
- The team realised that they could influence change within their practice and that by 'taking time out' to consider work streams and processes they could improve the service which they deliver and ultimately improve the outcomes for children. Finding more effective and efficient methods of work allowed them to focus on children with identified additional needs while avoiding being overwhelmed by reviewing otherwise healthy children and duplicating work with partner agencies.

---

## Achievements

- Re-design of how the team delivered the HCP Pathway:  
The team continue to lead and deliver the HCP – the universal offer to all families with pre-school children and the universal plus offer to all identified vulnerable families with pre-school children who have additional needs. The team revised the delivery of the time frame of the universal offer within the HCP to:
  - Health review by 1 year of age

- a further health review by 2 years 6 months (flexibility to the specific times as long as completed by these times) and the school nursery drop-in (half-term/term negotiated with the school nurseries).

All three contacts within the universal offer are delivered by the team in partnership with the local children centres and the local school nurseries. The health reviews assess the child's physical, social and emotional development, their growth and health. The school nursery drop-ins provide support to parents in relation to all aspects of their child's development and reinforce the immunisation programme.

The health visitor universal pathway which delivers the HCP is as follows:

14 days	New baby review
4-8 weeks	Health review
3 months	Weaning contact at children's centre
1 year	Health review
2 year 3 months	Health review
3 years	School nursery drop-in within school nursery setting (half term/termly)

- Utilisation of the Lean principles in exploring processes within the team:  
At 3.5 years of age, the team were sending out a questionnaire to parents and asking them to complete and return it to ourselves. The 3-year questionnaire process was not effective in that it was a very lengthy process, requiring large amounts of time from the clerical, community nursery nurses and health visitors. The return rate of the questionnaires was not very high, and there were a number of 'bottle necks' so the monthly process was invariably never completed within time scales. The lean process enabled the team to 'unpick' the work stream, calculating the time each activity took, the cost to the service of the time of the activities, the delays within the process, how the process was completed and how the clients viewed the questionnaires.

The Lean process empowered the team to realise benefits for the clients and the team.

- Through the implementation of the revised delivery of the HCP, the team was able to release a significant amount of time which they invested in service development through the planning and establishing of ante-natal sessions in partnership with the locality children's centre and with the engagement of the local clients. The team have continued to meet to plan for the ante-natal sessions. The team valued the lean process and how it enabled them to influence their practice.

---

## Impact

- Increased partnership working with the school nurseries
- Stream lined process for parents – children and parents are having developmental assessment as part of nursery entry, concerns, if any are identified
- Nursery staff are liaising with health visitor team. No duplication of assessments by partner agencies
- Released time for the team to further develop and improve services
- Increased job satisfaction for the team as the children identified with additional needs are targeted, resulting in meaningful interventions by the team for those children most in need
- South Tees area are now working to the same pathway ensuring continuity and consistency of service across the localities
- Increased accessibility for parents to access the health visitor service when their child commences nursery as the drop-ins are at the beginning and end of sessions when they drop off or collect their child
- Costs saved through reduced staff time spent on duplication of processes and improved service from the start of the HCP pathway.

---

## Benefits

- The re-designed pathway was disseminated to all locality teams and locality managers and as a result has been embedded into practice across South of the Tees
- The 'buy in' from the other locality teams and the engagement with the school nurseries
- The value of employing the lean process as a tool to enable the locality teams to explore and improve the service they deliver
- No duplication of developmental assessments by partner agencies thus offering more streamlined service to parents
- Previous to the re-design, the team spent 10.6 days per month undertaking & completing the process which equated to a cost of £2,858.72. Annually this equated to 127.2 days and at a cost of £34,304.64. Following the redesign, the team spent 1.6 days per month at a cost of £234.49. Annually this equated to 19.2 days and at a cost of £2,813.88. This has resulted in an overall cost saving of £31,490.76.

---

## Innovations

- Exploring and 'unpicking' the HCP to identify ways the programme could be applied to best meet local needs
- The project has released savings in staff time and costs in a process that was not achieving what it was intended to and was duplicating work between partner agencies
- The team challenged historical thinking and working practices

- The team was able to share their re-design with the other seven health visitor teams within the South Tees Locality.
- 

### **Personal Narrative Story**

- 'Valuable things get picked up earlier and sorted out before they go to school. Help is at the end of the phone and provides good support for parents'. Helen Peacock, Green Lane School Nursery Teacher.
- 'School happy as now have access to health information via the named person'. Sophie Blake, Newham Bridge School Nursery
- 'Attend stay and play session at the nursery so parents are able to access health visiting service. Lots of dads attend the stay & play session'. Ann Teasdale, St Edwards School Nursery Teacher