



**Service Priorities and Programmes**  
**Electronic Presentations**

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**Extreme Preterm Infants – a Future Integrated Care Pathway**

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**Introduction**

Patent ductus arteriosus (PDA) is a common congenital heart condition in preterm infants (weighing <800 grams or less than 26 weeks gestation). CTSD received 122 premature infants with PDA from 2010 to July 2012 undergoing PDA ligation. With the new care pathway, CTSD will be able to reduce unnecessary neonatal transport, cancellation of operation due to infection and spontaneous closure of a PDA. Therefore, healthcare costs will be reduced.

**Objectives**

1/ To design a new care pathway for the extreme preterm infants; 2/ To better educate new nursing graduates looking after the fragile patients.

**Methodology**

New pathway included a pre-admission nursing assessment; pre-operation nursing care plan; nursing care plan for operation day and post-operation day one; discharge/transfer summary, and a care map integrating an overall nursing care of PDA ligation. A trial implementation arranged for 10 nursing staff to introduce the pathway and its purpose from 27th August to 2nd September 2012. Each newly admitted patient, who was planned for PDA ligation, would be provided with the new nursing care pathway. A questionnaire together with feedbacks on the care plan was distributed after the trial. Nursing interventions to prepare the infants and family physically and psychologically for operation would be carried out according to the PDA ligation care pathway.

**Result**

With the pathway, emphasis was made on the patients' current infection status and the latest echocardiogram findings to confirm the presence of a PDA in the pre-operation aspect. A decrease in unnecessary transport and thus operation cancellation that might due to current infection and/or spontaneous closure of PDA was expected to achieve. On the admission day, a checklist was attached in the care pathway to act as a clear guideline especially for junior staff. Positive feedbacks given by staffs proved a smoother workflow and more comprehensive preparation achieved. On discharge planning, emphasis in advance planning in transferring the patient back

to the referring hospital was introduced. Staff's opinion and compliance to the new care pathway was a main concern. Positive feedbacks were received from questionnaires given to 10 nursing staffs: 100 % agreed that the PDA nursing care plan was user-friendly; 100 % agreed that the PDA nursing care plan was useful; 100 % agreed that they were willing to implement the new care pathway.