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## Press Release

### For Immediate Release

7 August 2018

# NON-INVASIVE AND PAINLESS JAUNDICE SCREENING FOR NEWBORNS IN POLYCLINICS

*Singapore, 7 August 2018* – Newborns who are two weeks old or younger with jaundice are now tested at the National University Polyclinics (NUP) using Transcutaneous Bilirubin (TcB) measurement – a non-invasive and painless jaundice screening method. Blood tests through heel pricks would no longer be necessary for most of these babies, saving them much discomfort and reducing parents' stress and anxiety.

Neonatal jaundice, or jaundice in newborns, occurs in most babies due to increased levels of bilirubin in the blood. Careful monitoring of jaundice is important as very high levels of bilirubin in babies, when left untreated, can result in complications such as brain damage and seizures.

### **A faster, painless way of assessment**

The TcB assessment was piloted in Jurong Polyclinic in March this year and was rolled out across all polyclinics in NUP on 21 May. A nurse places the TcB device's measuring probe on the baby's sternum and lightly pushes down until there is a flash of light. Based on the amount of light reflected from the baby's skin, the device is able to calculate the baby's bilirubin level.

Before it was introduced, all newborns with jaundice had to have a heel prick for a serum bilirubin test to determine the level of bilirubin in their blood. "We received feedback from parents that the frequent blood tests are distressing to both them and the newborns. This triggered a search for a solution," said Dr Ruth Zheng, Family Physician, Consultant, NUP.

"With TcB screening, in babies two weeks old or younger, only those with readings above a pre-determined threshold are subjected to blood tests. Time taken for the TcB measurement is also much shorter; the TcB result is known within two minutes of assessment while the SB test takes about 30 minutes," added Ms Jancy Mathews, Chief Nurse, NUP.

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Every month, about 600 newborns aged 14 days and below went through more than 1,400 TcB assessments at NUP polyclinics to be assessed if they were jaundiced. Out of which, only 20% required a SB test through heel prick to confirm their status.

In addition, nurses at the polyclinics are able to spend more time with the new mothers in the first two weeks post-delivery with this new initiative. Said Ms Mathews, “This allows our nurses to review the new mothers’ well-being and provide them with support on any postnatal or infant-care issues they may be experiencing, such as breast-feeding problems, excessive crying or poor feeding in babies.”

### **Close collaboration brings benefits to patients**

This TcB initiative is a collaboration between NUP and the Department of Neonatology at the National University Hospital (NUH), which are both part of the National University Health System. NUH has been using TcB measurements since 2010. Together with this, the process for direct admission from polyclinics to the wards for babies who have high levels of jaundice and require phototherapy was initiated.

Dr Chinnadurai Amutha, Senior Consultant, Department of Neonatology, NUH said, “The collaborative efforts of NUH and NUP have accomplished the successful implementation of two major changes in the last six months - the introduction of TcB and a new process that enables direct admission of newborns to the NUH wards to initiate phototherapy. This obviated the need for babies who were already evaluated in the polyclinics to undergo a second assessment and waiting at the NUH Children’s Emergency to be admitted. The painless assessment and seamless transfer of care between the institutions have made a huge difference in minimising disruption to mother-infant bonding at the most needed time.” Dr Amutha worked with NUP on the implementation of TcB assessment in the polyclinics.

“TcB assessment is an additional tool that primary care physicians and nurses can use in the management of neonatal jaundice in the community. This new initiative is part of our continuous efforts to improve patient care in our polyclinics and family medicine,” said Dr Ruth Zheng.

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## **About the National University Polyclinics**

The National University Polyclinics (NUP) provides primary care treatment for acute illnesses, management of chronic diseases, women and child health services and dental care. As part of the National University Health System (NUHS), we collaborate with the hospitals and specialty centres within the NUHS to redefine healthcare.

NUP comprises a network of seven polyclinics – Bukit Batok, Choa Chu Kang, Clementi, Jurong, Pioneer, Queenstown and Bukit Panjang, which will open in 2020. Partnering general practitioners, grassroots, the community and social care partners, we work together to ensure the well-being of the community we serve.

For more information on NUP, visit [www.nup.com.sg](http://www.nup.com.sg).