INFANT Centre at University College Cork To Pilot IBM Remote Monitoring and Predictive Analytics for Detecting Expectant Mothers at Risk During Pregnancy

Dublin, Ireland - 16 Mar 2015: IBM (NYSE: IBM) and the INFANT Centre (Irish Centre for Foetal and Neonatal Translational Research) at University College Cork (UCC) today announce 'LEANBH' a pilot research project providing remote healthcare monitoring to expectant mothers to improve the detection and treatment of hypertension and pre-eclampsia during pregnancy.

Speaking in Washington, DC, at an event hosted by Science Foundation Ireland to celebrate scientific collaboration between Ireland and the United States as part of the St Patrick's Day Festival, An Taoiseach, Enda Kenny TD, said, "I congratulate both IBM and the Infant Research Centre for collaborating on LEANBH. The project demonstrates the value of collaboration between industry and academia. LEANBH has the potential to have a global impact on the medical care offered to expectant mothers."

Pre-eclampsia is a pregnancy complication that affects approximately 5% of all pregnancies. Hypertension, one indicator of pre-eclampsia, is more common in all expectant mothers.

The vision for LEANBH is to manage hypertension and pre-eclampsia care in a patient's home using remote monitoring of the medical data of the at-risk expectant mothers. It aims to reduce the number of unnecessary follow-on hospital visits, lowering the additional stress and cost of visits to the patients and on the healthcare system.

Teaming with IBM to complement its own expertise, the world-leading INFANT Centre at Cork University Maternity Hospital is creating a patient-centric perinatal system that combines real-time remote monitoring technology via mobile with web-based advanced analytics and care management.

At INFANT, remote monitoring will be combined with predictive analytics that can enable faster responses and a higher quality of care through automated alerts to doctors. It also aims to help improve data sharing among the healthcare team members and offer the ability to integrate with electronic healthcare records.

Announcing LEANBH, Professor Louise Kenny, Consultant Obstetrician and Director of INFANT, said "This technology has the potential to revolutionise antenatal care for expectant mothers on a global scale, and is another example of the cutting-edge research ongoing at INFANT. Making pregnancy safer is a core objective of our Centre".

Healthcare researchers will be able to use predictive modelling, trending and scoring to anticipate patient outcomes and evaluate the potential effects of early interventions.

The research data from the pilot will also provide capabilities to the Centre for devising new predictive models

of perinatal healthcare monitoring, which can be used to identify and improve the outcome of pregnancy for both mothers and their babies.

To protect patient confidentiality, individual patient data is de-coupled from the monitoring data. Results can be securely viewed from any user authorised web-enabled terminal, PC, tablet or smartphone.

INFANT is funded by Science Foundation Ireland under the SFI Research Centres programme.

Bill Kearney, Director IBM Ireland Analytics & Solutions Lab said, "Data insights and analysis can help healthcare providers move beyond a one size-fits-all approach and pinpoint individualised intervention for patients. The project can contribute to making the healthcare system as a whole more streamlined, efficient and effective."

In addition, drawing on these insights gained from the pre-eclampsia patient, medical teams at INFANT can case manage to create more personalised and shareable, coordinated electronic care plans that can support patient-centred medical homecare models for the baby's early years.

Earlier this year, IBM announced it is working with INFANT to help improve long-term outcomes for babies in neonatal intensive care through early and accurate detection of neurological problems with real time monitoring..

Commenting on the announcement Prof. Mark Ferguson, Director General of Science Foundation Ireland and Chief Scientific Adviser to the Government of Ireland, said: "The innovative research taking place at INFANT highlights how the twelve SFI research centres will change people's lives for the better. Collaborations with industry such as the Leanbh project will lead to huge improvements in the care of newborns across the world. We look forward to building on this partnership and continuing to invest in research which delivers economic and societal impact."

For more information

IBM Big Data Analytics, visit: ibm.biz/BdFq55

The Irish Centre for Fetal and Neonatal Translational Research (INFANT) at University College Cork, visit: infantcentre.ie

Science Foundation Ireland (SFI) visit: sfi.ie

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