Pneumatic tube systems (PTS) are often used in hospitals, including Westmead Hospital and The Children’s Hospital at Westmead. The system at Westmead is due for an upgrade and a number of options are being considered.

Neil Catlett, Director of Operations at Pathology West, said, “Pneumatic tube systems have been around since the 1800’s in many forms—from transporting mail underneath New York, to pushing trains through tunnels and transferring money in banks and stores. Modern PTS systems include intelligent technologies that can prioritise and actively determine the fastest routes to get diagnostic samples to the laboratory for testing. Given that some samples require very fast results, this system is a must for large hospitals and precincts like Westmead.”

“To get samples from many areas to us in Pathology, they are placed in sealed capsules, referred to as carriers. These carriers are air propelled through a tube system which snakes through roof systems, walls and underground. The samples can travel very fast over large distances—much faster than a human could carry them.”

The Westmead Redevelopment project team are working with the current users of the pneumatic tube system to develop a more efficient and integrated system.

A system design workshop was held on Monday 8 August 2016, and another will follow soon. The August session was attended by staff from Western Sydney Local Health District, The Sydney Children’s Hospital Network, Institute of Clinical Pathology and Medical Research (ICPMR), Health Infrastructure and the Westmead Redevelopment.

This group is looking at advanced systems that could be installed in the existing spaces and within the central acute services building. New systems are more efficient and will free up staff to perform other tasks. The new systems could include these features:

- **Radio-frequency identification (RFID)** - Barcoding technology to identify, track and trace the tubes as they progress through the system.
- **Automated loading and unloading potential** — It includes the ability for the carriers to be automatically unloaded, opened, emptied, closed and returned to their origin. 

Continued
Mita Dey demonstrates the insertion of a carrier into the system, which is enclosed in a cupboard.

- **Controlled speed settings for blood product and plasma requirements** - The system speeds up and slows down to prevent issues with blood samples during the transport process which might cause the sample to deteriorate.

- **Prioritisation** – Urgent samples jump ahead of others depending upon the settings inputted at the start of the journey. They system also can incorporate minimum wait times so samples are not ‘parked’ for too long.

- **Leak resistant capsules**— New seal systems help to prevent leaks and spills during transport. They could potentially transport infections substances while reducing contamination risks.

**From the web**

Read about the fascinating history of pneumatic tube systems:

- [Pneumatic Tubes: A Brief History (The Atlantic)](#)
- [Wikipedia](#)
From Friday, 16 September a new access route from the Mons Road temporary car park and Institute Road car parks to Westmead Hospital will be implemented. This route will improve pedestrian accessibility and flow into the hospital. This route will be available in preparation for the opening of the new road.
Did you miss the pop up booth at Westmead Private and The Children’s Hospital at Westmead last week? There is another chance to chat to the Parramatta Light Rail Project Team.

Tuesday, 13th September
Westmead Hospital
Main entrance (near the volunteers desk)

Find out about more of the Light Rail Project here
www.parramattalightrail.nsw.gov.au
Important information on our works

- Please be patient, there will be disruption on the campus over the next five years.
- Check signs around your usual parking area for upcoming changes as the project progresses.
- Follow instructions from site staff.
- Walk only on marked paths.
- Report any concerns or questions you have to the Project Office – 1800 990 296

Works On Site

- **New road construction works** underway. Works due for completion by mid September.
- **Car parking construction**. Access to Oval is closed until the new car park is opened in November 2016.
- **Construction works** continuing in this location. Please follow the instructions of traffic wardens.
- **New Children's Hospital at Westmead** car park access works underway. Works to be complete mid October.
- **Construction of the new helipad**.