Digital Care Systems

Ulster University

HSC Southern Health and Social Care Trust

CarePath-ASSIST

Automating Shared Synthesis of Information for Safer Treatment

Healthcare systems rely on self-advocacy from service users to maintain the safety and quality of care.

Systemic bias, service pressures and workforce issues often deny agency to patients at times when they need to have most control over representation of their story (fig. 1 & 2).

This drives diagnostic error, treatment delay or failure to treat important conditions. In maternal care, perinatal mental health and thrombosis are significant challenges.

With funding from SBRI Health care we are developing an NLP powered platform that will empower mothers to be more active agents in their perinatal care.

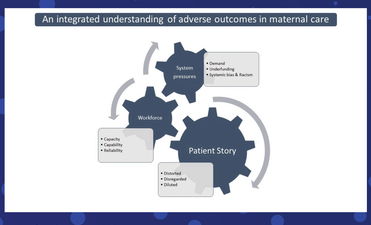
A recent feasibility research study in collaboration with Southern Health and Social Care Trust & Ulster University highlighted how the technology could reduce harm from blood clots and birth trauma.

Our perinatal pathway assistant will help mothers ensure the safety and quality of their maternal care.

CarePath-ASSIST uses NLP to enable women to undertake important health assessments with assistance of our AI driven shared synthesis engine. This makes sure a mother's story or symptoms are not distorted, disregarded or diluted (Fig. 2 & 3). This will improve the safety and quality of care. We are using the platform to support assessment for blood clots and PTSD after birth trauma.

By supporting remote and asynchronous health assessments the platform could also save between 5000 and 7000 hours of midwife time each year.

Ensuring better synthesis of the patient story is critical to achieving the safety, quality and efficiency of care needed to eliminate inequality in maternal outcomes.



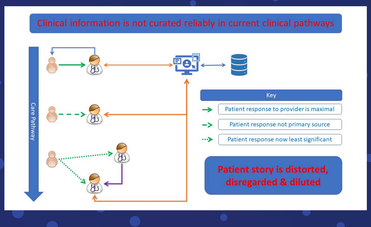


Figure 1 & 2. Failure to represent the patient / service user story is a common source of avoidable harm.

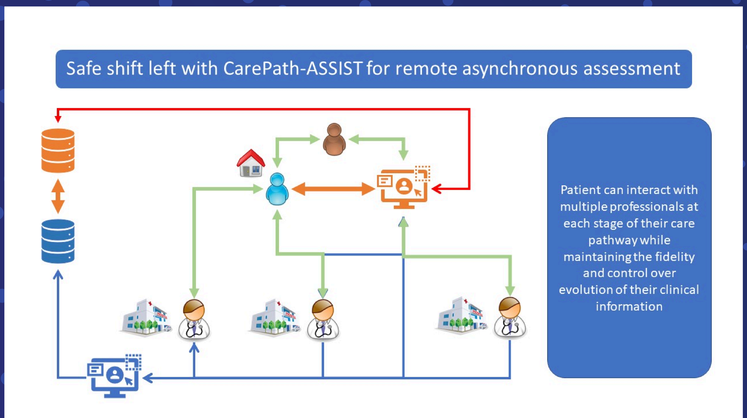


Figure 3. The CarePath-ASSIST shared synthesis engine enables patients to be more active agents in their care. This is the key to reducing health inequalities in maternal care.

SBRI HEALTHCARE

The AHSN Network

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