HA Convention 2016

QEH experience in universal neonatal screening for IEM



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Background

- Severe
- ~1:2,500 births
- HK lags way behind many places
- PWH is running a self-paid service

Pilot in QEH

- 4Q 2015
- 6,000 deliveries per year
- IEM clinic (paed)
- IEM program to future New Children Hospital

Workflow

- 1. Parental education
- 2. Consent
- 3. Sampling
- 4. Dispatching samples
- 5. Dried blood samples preparation and testing
- 6. Reporting
- 7. Recall and repeating testing
- 8. Confirmatory testing
- 9. Treatment and monitoring
- 10. Evaluation

Step	Main task(s)	Issue(s)
1. Parental education	 Information delivery and education about the NBS 	 Preparation of the education materials and programme Timing (AN/PN) Involved parties (Obstetrics)
2. Consent	• Obtain consent	 Tailor-made consent for expanded NBS Content (type of diseases screened, ownership of residual blood spots, storage of residual blood spots, duration of shortage and future use of stored samples) Timing (AN/PN/just before blood sampling) Group vs individual face-to-face Involved parties (obstetrics & Paediatrics) Staffing Training to staff of involved parties
3. Sampling	Blood spot sampling	 Timing of blood taking (48 hours after birth, took milk) Method Involved parties (Obs & Paed) Staffing (phlebotomist) Training to staff of involved parties
4. Dispatching samples	 Transportation of blood samples to laboratory 	Any special arrangement (Obs)
5. Dried blood samples preparation and testing	 Samples preparation and testing in expanded NBS laboratory 	 Availability of accredited and capable laboratory Equipment and resources Staffing (chemical pathologist) Involved parties Training to staff of involved parties

Step	Main task(s)	Issue(s)
6. Reporting	 Results are interpreted and reported by Chemical pathologists 	
7. Recall and repeat testing	 Recalling screening positive cases and taking blood for repeat testing 	 Urgency of recall Urgency of repeat blood taking Urgency of laboratory testing Contingency management of suspected baby Staffing Involved parties (e.g. Paediatricians) Training to staff of involved parties
8. Confirmatory testing	• Diagnostic	 Method Staffing Involved parties (Patho) Training to staff of involved parties
9. Treatment and monitoring	 Continuous management and monitoring 	 Availability of treatment protocols Staffing Involved parties (Paed) Training to staff of involved parties
10. Evaluation	 Assessing the outcomes and result of the programme 	 Aims of evaluation Scope of evaluation Staffing Involved parties

Issues

- Workflow: parental education, consent, sampling
- Mechanism to screen all eligible: check list
- Transportation
- Resources
- Education: lectures, visit

Call back if abnormal result

- Panic
- Wrong or answered telephone number
- Which telephone number- registered in HA? Additional? Self input?

Involvement of doctors

- More patients? Quota
- Questions in antenatal: available? Arrangement?
- Family history: PDC?
- Early discharge
- Results of IEM screening in postnatal
- Education
- Staff engagement

Thank you