## Reducing unnecessary admissions associated with pediatric mononucleosis via implementation of EBV IgM testing in the emergency department

Emergency Clinical County Hospital Targu Mures Mures, Romania

## **KEY PARTNERS / STAKEHOLDERS**

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Pediatric patients present to the emergency department for a variety of reasons, including viral symptoms such as fever, fatigue, sore throat, swollen lymph nodes, and more. Quickly and accurately identifying the etiology of symptoms is a crucial step in triage, in addition to initiating correct treatment (if necessary).

At the Emergency Clinical County Hospital Targu Mures, Romania, all children with pharyngitis, tonsillitis, or respiratory tract viral infections are admitted upon presentation in order to undergo supplementary testing for viral infections (RSV+Influenza). Patients who are stable (i.e., unchanged and satisfactory clinical condition) are discharged irrespective of their viral testing outcomes. Conversely, an unstable clinical status prompts referral to the Infectious Disease Clinic, especially in cases exhibiting clinical suspicion of mononucleosis, which requires confirmation testing that takes 2 days on average for results. Notably, the Infectious Disease Clinic operates in a separate hospital, requiring patient transport via ambulance.

In a collaborative effort, an integrated clinical care team comprising laboratory medicine, clinicians, and administration, incorporated EBV IgM into the emergency panel testing for the Pediatric ED to enable earlier rule-out of mononucleosis and when appropriate, earlier discharge. The new pathway resulted in a 2% reduction (n=20) in Infectious Disease Clinic referrals and a corresponding 2% decrease (n=26) in Pediatric Ward admissions over 10 months. Notably, diagnostic wait-times for children with mononucleosis suspicion post-examination decreased from 3.42 hours to 2.17 hours.

