

Improving influenza care

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Although the influenza epidemic in the Netherlands was relatively mild with considerably less mortality as compared with previous years, this winter was long. Normally the influenza epidemic lasts about nine weeks. This year, it was prolonged by five weeks (source: RIVM report March 2019).

As mentioned by Lankelma et al. in this issue, the seasonal influenza epidemic poses a significant burden on hospitals in terms of capacity and costs.¹ It is known that patients suspected of suffering from influenza may be admitted to the hospital and cared for in isolation. This is done with the hope of reducing the risk of hospital transmission while awaiting results of respiratory sample testing. For a significant number of these patients, isolated care proves unnecessary.

Unfortunately, centralized laboratory testing of respiratory samples takes time. Accelerating diagnosis using point-of-care (POC) testing may prevent unnecessary isolation procedures. In recent years, rapid, sensitive and reliable POC molecular assays have been developed, reducing the time from sample collection to results.

Earlier this year, Ramahat-Langendoen et al. published a paper in which they described how using such a rapid POC molecular assay can reduce time-to-diagnosis, hospital stay and, thereby, in-hospital costs. This study was performed in a large university hospital in the Netherlands between December 2016 and April 2017. Both routine and rapid POC testing were performed and it was calculated that a reduction in-hospital costs by € 300-1000 per patient suspected of infection with influenza could have been achieved if decision on admission would have been based on the results of the latter test.²

Additionally, using a POC influenza testing led to a more accurate prescription of antivirals and antibacterial medication in another recent publication.³

In the study by Lankelma et al. in this issue, a similar, although not identical clinical pathway was actually implemented using the same commercially-available PCR-based test as was used in the previously mentioned studies. Their study was performed during the influenza epidemic in 2017-2018. POC testing was performed by trained emergency room nurses and even by receptionists who have first contact with patients, thereby further speeding up the time to diagnosis. Patients who were diagnosed with influenza were admitted to a separate ward for influenza patients. The authors estimated that by using this approach they saved an estimated total of € 400,000.¹ In the Netherlands, there are about 80 general hospitals. Using a similar approach throughout the country could theoretically lead to a reduction in over € 20 million on influenza-related costs. In fact, several other hospitals have already adapted and implemented this POC testing approach (<https://www.zorgvisie.nl/ikazia-beperkt-opnamedruk-door-griep/>).

REFERENCES

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