Point-of-care troponin testing in Dutch primary care: preferences and referral decisions of general practitioners

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Background

GPs express the desire to use a point-of-care troponin test, to enhance their ability to rule out acute coronary syndrome (ACS) in primary care.

• However: the majority of those tests are insufficiently sensitive, especially early after symptom onset.

Objective:

Investigate GPs’ preferences and requirements regarding point-of-care troponin testing for patients presenting with (a)typical chest pain in primary care, and to estimate the effect on referral decisions.

Online questionnaire in LimeSurvey:

• 34 questions
• distributed among 837 Dutch general practitioners in June 2015

Data were analyzed using R. Results are based on multiple imputation. 126 respondents were included in the final analysis.

Expected added value:

• Reasonable to very high added value: 67%

Effect on troponin test use:

• Expected increase in troponin test use due to availability of point-of-care test (figure 1)

Results

Expected effect on referral decisions:

• Decrease in immediate referrals (figure 2)

• However, possible increase in:
  • Referrals to outpatient cardiology clinics
  • Consultations with cardiologists
  • Other examinations (other laboratory tests, ECG)

Requirements:

• 78% - test result available within 10 minutes
• 78% - funding of the test device
• 69% - perform test with finger prick blood sample

Conclusion and Discussion

• According to GPs, the point-of-care troponin test can be of added value in excluding ACS.
• Actual test implementation will depend on test characteristics, including test duration, type of blood sample required, and funding of the analyzer.