Implementation of quality assured POC testing in Dutch general practice

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Background Dutch general practitioners (GPs) have widely adopted quality-assured point-of-care testing (POCT) in close cooperation with experts from diagnostic centers and laboratories. The patient profits: more safety, better service and better care. Our aim was to establish a sustainable, easily accessible, quality-assured POCT method for all eligible patients in primary care, starting with C-reactive protein (CRP).

Methods Overall: Establish a multidisciplinary Saltro POCT team; realise a data-connectivity program; research impact of intervention.
Per POC test: Evaluate the analytical performance and agreement of POCT devices; design a quality-assured POCT program incorporating training for GPs and practice nurses; implement POC test in practice.

Results 200 GP offices/600 GPs (± 750,000 pts) have so far been trained online (www.acutehoest.nl) and by our POCT team, and are using the best tested devices for CRP POCT. The number of CRP POC tests increased steadily from 0 in 2010 to 27,346 in 2015.
Our survey has shown that 98% of GPs are pleased to have CRP POCT, 86% of practice nurses believe the quality control by Saltro to be of added value, and 23% of practice nurses experience occasional problems with execution of the test. A small survey showed that CRP POCT caused 38% less referrals from GP night/weekend care services to secondary care and no significant reduction in antibiotics, although better targeted prescriptions.
An automated data connectivity circuit has been implemented in 2016 and will make long-distance quality assurance possible. Because this data connectivity is now fully functional, more validated POC tests (Hb, urine analyser, glucose, lipids, HbA1c, D-dimer) are offered by Saltro.

Discussion High-quality CRP POCT is growing rapidly, and is fully embraced by GPs in routine care in Utrecht (NL) after introduction by Saltro in 2011. And with visible results: use in night/weekend care shows a preliminary reduction in hospital referrals by 38%, together with better selection of patients for antibiotic treatment. Quality assurance by Saltro is highly valued and considered as a new standard for POCT in primary care. Moreover, in 2015 a new guideline ‘POCT in general practice’ was published by the NHG (Dutch College of General Practitioners), entirely coherent with Saltro’s view on the topic.