

ORIGINAL ARTICLE

Users Regard Operator Training as Critical for Successful POCT Applications

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SUMMARY

Background: Point-of-care tests (POCT) measure analytes close to the patients and are a complementary supplement to the test menu of medical laboratories. However, the involvement of many different stakeholders makes it challenging to ensure reliable results.

Methods: In a survey, we asked experienced POCT users how they control their total POCT process and what factors they consider essential for success. Results were verified in four in-depth interviews.

Results: Overall, 73 German participants from various medical disciplines completed the survey. All but one participant regarded operator training as important but only half of the participants' institutions conducted operator training on a regular basis. Participants often requested e-learning, but face-to-face teaching is still preferred. Twenty-one percent of participants already used e-learning and reported mixed satisfaction. Fifty-five percent of the participants never refer to the quality management manual. Instead, 94% stated that if a POCT error arises a contact person for POCT is always available at their workplace. The majority of participants think that external and, in particular, internal quality controls are important for POCT. Only a few difficulties for performing quality control such as "temporal expenditure" and "lack of information about the importance of internal quality control" were commonly mentioned. For future developments, participants expect evolution and improvements especially with regard to "measurement quality and reliability". The answers of the experts in the in-depth interviews largely corresponded with the participants of the survey.

Conclusions: The importance of operator training is well established and confirmed in this work. How to conduct this training is less certain, but the answers in this survey suggest some form of blended learning with e-learning and practical elements. The discrepancy between the high importance that guidelines and other normative documents place on written information and their low practical usage was striking.

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Supplementary

General Information

Please tell us your gender. *

Please select one of the following answers:

- Female
- Male

Which age group do you belong to? *

Please select one of the following answers:

- 18 - 35 years
- 35 - 60 years
- Older than 60 years

Which professional group do you belong to? *

Please select one of the following answers:

- Member of the nursing team
- Doctors
- MTAs
- Member of medical technology
- Member of an outpatient nursing service
- Member of the data center
- Member of the pharmacy
- Other

Where is your main workplace? *

Please select one of the following answers:

- Ward of a hospital
- (Central) laboratory of a hospital
- Emergency department
- Surgery
- Doctor's office
- Retirement/Assisted living home
- Other

Are you a specialist in the POCT field? *

Please select one of the following answers:

- POCT coordinator *
- POCT Officer **
- Member of a POCT commission
- I do not have any special function in the POCT area
- Other

* - POCT Coordinator: He or she delegates the development of a QM manual, the preparation of instructions for pre-analytics, analytics, and post-analytics, the planning of briefing, training, and retraining, the involvement of central laboratories in QA monitoring and more complex monitoring POCT systems.

** - POCT Officer: He or she is under the supervision of the POCT Officers in the department. Carrying out the analyses on the POCT system, performing the quality controls in accordance with the guidelines, documenting the analysis results and maintaining the POCT devices.

What is the size of the facility at which you work? *

Please select one of the following answers:

- 1 to 49 beds
- 50 to 99 beds

- 100 to 149 beds
- 150 to 199 beds
- 200 to 299 beds
- 300 to 399 beds
- 400 to 499 beds
- 500 to 599 beds
- 600 to 799 beds
- 800 and more beds
- No beds / outpatient care

Methodology and analytical procedures

For what purpose are POCT methods used in your workplace? *

Please select all applicable answers:

- Diabetes diagnostics
- Coagulation diagnostics
- Diagnosis of cardiovascular diseases
- Emergency diagnostics (intensive care, emergency medicine)
- Drug and drug screening
- Neonatology (blood glucose determination, bilirubin determination)
- Urine quick tests
- Microbial rapid tests
- Other

Involved persons

Is there a POCT coordinator or POCT representative at your workplace? *

Please select only one of the following answers:

- Yes
- No

How useful do you think the introduction of a POCT coordinator or a POCT representative is in terms of quality assurance of the POCT applications? *

Answer this question only if the following conditions are met:

Answer was "Yes" to question '8 [pococoordinator]' (Is there a POCT coordinator or POCT representative at your workplace?)

Please select only one of the following answers:

- Very useful
- Meaningful
- Partly useful, sometimes not useful
- Minimally useful
- Does not make sense

How useful would you find the introduction of a POCT coordinator or a POCT representative with regard to the quality assurance of the POCT applications? *

Answer this question only if the following conditions are met:

Answer was "No" on question '8 [pococoordinator]' (Is there a POCT coordinator or POCT representative at your workplace?)

Please select only one of the following answers:

- Very useful
- Meaningful
- Partly useful, sometimes not useful
- Minimally useful
- Does not make sense

Have you already been in direct contact with the POCT coordinator or POCT representative? *

Answer this question only if the following conditions are met:

Answer was "Yes" to question '8 [pococoordinator]' (Is there a POCT coordinator or POCT representative at your workplace?)

Please select only one of the following answers:

- Yes
- No

Is the POCT coordinator or the POCT representative available for inquiries regarding POCT? *

Answer this question only if the following conditions are met:

Answer was "Yes" to question '8 [pococoordinator]' (Is there a POCT coordinator or POCT representative at your workplace?)

Please select only one of the following answers:

- Yes
- No

If you have any questions or problems regarding POCT, would you contact the POCT coordinator or the POCT representative? *

Answer this question only if the following conditions are met:

Answer was "Yes" to question '8 [pococoordinator]' (Is there a POCT coordinator or POCT representative at your workplace?)

Please select only one of the following answers:

- Yes
- No

Is there a POCT Commission? *

Please select only one of the following answers:

- Yes
- No

Do you have any insights into how the POCT Commission works? *

Answer this question only if the following conditions are met:

Answer was "Yes" to question '14 [commission]' (Is there a POCT commission?)

Please select only one of the following answers:

- Yes
- No

Which professions are part of the commission? *

Answer this question only if the following conditions are met:

Answer was "Yes" to question '15 [insight commission]' (Do you have any insights into how the POCT Commission works?)

Please select all applicable answers:

- Members of the nursing team
- Doctors
- MTAs
- Members of medical technology
- Members of an outpatient nursing service
- Members of the data center
- Members of the pharmacy
- Members of the administration
- Patients
- I do not know
- Other

Are you yourself part of the POCT Commission? *

Answer this question only if the following conditions are met:

Answer was "Yes" to question '15 [insight commission]' (Do you have any insights into how the POCT Commission works?)

Please select only one of the following answers:

- Yes
- No

How often does the Commission meet? *

Answer this question only if the following conditions are met:

Answer was "Yes" to question '15 [insight commission]' (Do you have any insights into how the POCT Commission works?)

Please choose one of the following answers:

- Never
- Less than once a year
- Annually
- Bi-annually
- Quarterly
- Once a month
- Once a week
- Other

Do all members of the POCT Commission receive and analyze the audit reports on the POCT quality assurance program? *

Answer this question only if the following conditions are met:

Answer was "Yes" to question '15 [insight commission]' (Do you have any insights into how the POCT Commission works?)

Please select only one of the following answers:

- Yes
- No

Will the people performing POCT be appointed by the POCT Commission and the associated responsibilities documented? *

Answer this question only if the following conditions are met:

Answer was “Yes” to question '15 [insight commission] '(Do you have any insights into how the POCT Commission works?)

Please select only one of the following answers:

- Yes
- No

How useful is the introduction of a POCT commission with regard to the quality assurance of POCT applications?*

Please select only one of the following answers:

- Very useful
- Meaningful
- Partly useful, sometimes not useful
- Minimally useful
- Does not make sense

Networking

Do POCT findings appear directly in the electronic patient record?*

Please select only one of the following answers:

- Yes
- No

Organization POCT

Are you familiar with the guidelines of the German Medical Association for Quality Assurance of Laboratory Medical Examinations (Rili-BÄK)?*

Please select only one of the following answers:

- Yes
- No

Who performs the POCT tests in your facility?*

Please select all applicable answers:

- Members of the nursing team
- Doctors
- MTAs
- Members of medical technology
- Members of an outpatient nursing service
- Patients
- I do not know
- Other

How many and which POCT tests do you personally perform each month?

Please enter your answer(s) here:

- Glucose determination (this is NOT blood glucose determination in neonatology)
- Coagulation diagnostics - primary hemostasis or platelet function (e.g., Platelet Function Analyzer PFA 100, aggregometry, ...)
- Coagulation Diagnostics - Thrombin/Fibrin Generation
- Coagulation diagnostics - clot formation (e.g., thromboelastography)
- Cardiovascular disease diagnostics - cardiac markers (e.g., myoglobin, CK-MB mass, troponins, ...)
- Cardiovascular disease diagnostics - Heart failure markers (e.g., BNP / NT-pro-BNP, D-dimers, ...)

- Drug and drug screening (e.g., alcohol, amphetamine-like designer drugs, barbiturates, benzodiazepines, cannabinoids, cocaine, methadone, opiates, buprenorphine, ...)

- Neonatology - blood glucose determination
- Neonatology - bilirubin determination
- Urine rapid test
- Microbial rapid tests
- Other tests

If you never perform a test, please enter a 0 in the appropriate field.

If you provided information in "Other Tests" - What POCT tests do you perform?

Please enter your answer here:

Are optimal environmental conditions ensured to carry out the tests?*

Please select only one of the following answers:

- Never
- Rarely
- Sometimes
- Frequently
- Always

How could the environmental conditions be improved? Answer this question only if the following conditions are met:

Answer was “Never” or “Rarely” or “Sometimes” on question '27 [Ambient conditions] '(Are there optimal environmental conditions to perform the tests?)

Please enter your answer here:

Who measures quality controls at your facility?*

Please select all applicable answers:

- Members of the nursing team
- Doctors
- MTAs
- Members of medical technology
- Members of an outpatient nursing service
- Patients
- I do not know
- Others

Is there a quality assurance officer at your workplace?*

Please select only one of the following answers:

- Yes
- No

Do you consult the QM manual for questions regarding POCT?*

Please select only one of the following answers:

- Always
- Often
- Occasionally
- Rarely
- Never
- There is no QM manual

Staff training

Do you receive regular updates on new developments and guidelines in the POCT field at your workplace? (e.g., discussion of new regulations or similar) *

Please select only one of the following answers:

- Yes
- No

How important do you rate a regular update on the quality of POCT results (for example in the form of lectures, e-mail newsletters, etc.)? *

Please select only one of the following answers:

- Extremely important
- Very important
- Relatively important
- Minimally important
- Not important

How is the competence of POCT employees ensured? *

Please select all applicable answers:

- Training
- Tests to check the level of knowledge
- Others

Was there an introduction to the POCT applications for you at the beginning? *

Please select only one of the following answers:

- Yes
- No

Do POCT trainings take place regularly at your workplace? *

Please select only one of the following answers:

- Yes
- No

How useful would you feel about taking POCT training at your workplace? *

Answer this question only if the following conditions are met:

Answer was “No” on question '36 [pocctraining]' (Do POCT trainings take place regularly at your workplace?)

Please select only one of the following answers:

- Very useful
- Meaningful
- Somewhat useful, sometimes not useful
- Minimally useful
- Does not make sense

How often do POCT trainings take place? *

Answer this question only if the following conditions are met:

Answer was “Yes” to question '36 [pocctraining]' (Do POCT trainings take place regularly at your workplace?)

Please select only one of the following answers:

- Never
- Less than once a year

- Annually
- Half-yearly
- Quarterly
- Once a month
- More than once a month
- If necessary
- I do not know

Who usually holds the POCT training? *

Answer this question only if the following conditions are met:

Answer was “Yes” to question '36 [pocctraining]' (Do POCT trainings take place regularly at your workplace?)

Please select only one of the following answers:

- Members of the nursing team
- Doctors
- MTAs
- Members of medical technology
- Members of an outpatient nursing service
- Members of the administration
- Company representative of the devices
- The training takes place via e-learning
- I do not know
- Others

Are the instructors of the training external or internal? *

Answer this question only if the following conditions are met:

Answer was “Yes” to question '36 [pocctraining]' (Do POCT trainings take place regularly at your workplace?)

Please select only one of the following answers:

- External
- Internal

Is participation in the POCT training mandatory? *

Answer this question only if the following conditions are met:

Answer was “Yes” to question '36 [pocctraining]' (Do POCT trainings take place regularly at your workplace?)

Please select only one of the following answers:

- Yes
- No

Have you already participated in a POCT training? *

Answer this question only if the following conditions are met:

Answer was “Yes” to question '36 [pocctraining]' (Do POCT trainings take place regularly at your workplace?)

Please select only one of the following answers:

- Yes
- No

Which topics were covered during the training? *

Answer this question only if the following conditions are met:

Answer was “Yes” to question '43 [Participation training] '(Have you already participated in POCT training?)
Please select all applicable answers:

- POCT regulations
- Quality Management System
- Responsibilities and contact persons
- Regulations for training
- Handling consumables
- Hygiene instructions
- Maintenance and servicing of the POCT devices
- Test principles / test systems of the POCT devices
- Preanalytics and sampling
- User identification
- Device control for safe operation including calibration
- Analysis (steps from switching on the device to reading the results)
- Documentation of the results
- Evaluation and interpretation of the results
- Quality control
- Troubleshooting
- Practical training on the device
- I do not know anymore
- Other

At the end of the training, was the training content checked successfully (for example, in the form of a query of the knowledge acquired)?*

Answer this question only if the following conditions are met:

Answer was “Yes” to question '43 [Participation training] '(Have you already participated in POCT training?)

Please select only one of the following answers:

- Yes
- No

Does your workplace advertise POCT training?*

Please select only one of the following answers:

- Yes
- No

Do you think POCT training improves the quality of POCT results?*

Please select only one of the following answers:

- Yes
- No

Is it ensured at your workplace that only appropriately trained personnel may carry out POCT?*

Please select only one of the following answers:

- Yes
- No

Would you like to have further training opportunities for POCT?*

Please select only one of the following answers:

- Yes
- No

What training opportunities would you like to see?
Answer this question only if the following conditions are met:

Answer was “yes” to question '49 [training options] '(Would you like to have further training opportunities in POCT?)

Please enter your answer here:

In what form does training generally take place in your workplace?*

Please select all applicable answers:

- Conducting of training by a lecturer
- Training by e-learning

Which form of training do you prefer?*

Please select only one of the following answers:

- Teaching by a teacher
- Training on e-learning

Do you already have the opportunity to receive further training at your workplace through e-learning?*

Please select only one of the following answers:

- Yes
- No

How often do you use the e-learning offer?*

Answer this question only if the following conditions are met:

Answer was “Yes” to question '53 [elearning work] '(Do you already have the opportunity to receive further training at your workplace through e-learning?)

Please select only one of the following answers:

- Never
- Once a year
- Two to three times a year
- Once a month
- Two to three times a month
- Once a week
- Two to three times a week
- Every day

How satisfied are you with the quality of the e-learning system?*

Answer this question only if the following conditions are met:

Answer was “Yes” to question '53 [e-learning work] '(Do you already have the opportunity to receive further training at your workplace through e-learning?)

Please select only one of the following answers:

- Very satisfied
- Satisfied
- Relatively satisfied
- Relatively dissatisfied
- Dissatisfied

What else would you do to improve the existing e-learning system?

Answer this question only if the following conditions are met:

Answer was “Yes” to question '53 [e-learning work] '(Do you already have the opportunity to receive further training at your workplace through e-learning?)

Please enter your answer here:

Would you like an opportunity for further education via the e-learning system.*

Answer this question only if the following conditions are met:

Answer was “No” on question '53 [e-learning work] '(Do you already have the opportunity to receive further training at your workplace through e-learning?)

Please select only one of the following answers:

- Yes
- No

How useful do you think the introduction of an e-learning system in terms of the overall quality of work of the employees?*

Please select only one of the following answers:

- Very useful
- Meaningful
- Somewhat useful, sometimes not useful
- Minimally useful
- Does not make sense

Hygiene

Are the POCT devices cleaned?*

Please select only one of the following answers:

- Yes
- No

How often?*

Answer this question only if the following conditions are met:

Answer was “Yes” to question '59 [cleaning] '(Are the POCT devices cleaned?)

Please select only one of the following answers:

- Never
- Less than once a year
- Annually
- Bi-annually
- Quarterly
- Once a month
- Once a week
- After each application
- At irregular intervals / when needed
- I do not know

Who does the cleaning?*

Answer this question only if the following conditions are met:

Answer was “Yes” to question '59 [cleaning] '(Are the POCT devices cleaned?)

Please select all applicable answers:

- Members of the nursing team
- Doctors
- MTAs
- Members of medical technology
- Members of an outpatient nursing service

- Members of the data center
- Members of the pharmacy
- Manufacturer-owned specialists (external)
- I do not know
- Other:

How do you generally assess the hygienic conditions at your workplace?*

Please select only one of the following answers:

- Very well
- Rather good
- Medium
- Rather bad
- Very bad

Preanalytics

Is POCT excluded for certain patient populations?*

Please select only one of the following answers:

- Yes
- No

Which groups are excluded?*

Answer this question only if the following conditions are met:

Answer was “Yes” to question '63 [patientgroup1] '(Is POCT excluded for certain patient groups?)

Please enter your answer here:

Who mainly makes the decision to measure with POCT?*

Please select only one of the following answers:

- Members of the nursing team
- Doctors
- MTAs
- Members of medical technology
- Members of an outpatient nursing service
- I do not know
- Other

Is there a procedure manual available for each POCT device?*

Please select only one of the following answers:

- Yes
- No

How confident do you feel when assessing the following preanalytical influences on the quality of POCT applications?*

Please select the appropriate answer for each item:

- Very confident
- Rather confident
- Rather unconfident
- Unconfident

1. Sampling
2. Clinical benefit of the analysis
3. Expertise of the analysis procedure
4. Storage of the reagents
5. Quality control and quality assurance
6. Technical limitations of the device
7. Analytics

Are batches of POCT devices (such as test strips) checked prior to commissioning? *

Please select only one of the following answers:

- Yes
- No

If you have an error message/deviation, do you have a contact person that you can contact at any time? *

Please select only one of the following answers:

- Yes
- No

How safe do you feel when using POCT devices? *

Please select only one of the following answers:

- Very safe
- Safe
- Rather safe
- Rather unsafe
- Unsafe

Are only RiliBÄK limits used? (RiliBÄK = Guidelines of the German Medical Association) *

Please select only one of the following answers:

- Yes
- No

In your opinion, are the limits too tight or too wide? *

Answer this question only if the following conditions are met:

Answer was “Yes” to question '71 [rilibaeklimits] '(Are only RiliBÄK borders used?) (RiliBÄK = Guidelines of the German Medical Association)

Please select only one of the following answers:

- Too tight
- Too wide
- Appropriate

Why do you think the limits are too tight?

Answer this question only if the following conditions are met:

Answer was “Too tight” on question '72 [rilibaeklimits2]' (In your opinion, are the limits too narrow or too wide?)

Please enter your answer here:

Why do you think the limits are too wide?

Answer this question only if the following conditions are met:

Answer was “Too wide” on question '72 [rilibaeklimits2]' (In your opinion, are the limits rather too narrow or too wide?)

Please enter your answer here:

How often do you deviate from the permitted limits? *

Answer this question only if the following conditions are met:

Answer was “Yes” to question '71 [rilibaeklimits] '(Are only RiliBÄK limits used?) (RiliBÄK = Guidelines of the German Medical Association)

Please select only one of the following answers:

- Never
- Rarely
- Occasionally
- Frequently
- Always

Are quality control materials sourced from the manufacturer of the device?

Please select only one of the following answers:

- Yes
- No

Is the frequency of internal quality control set for each device? *

Please select only one of the following answers:

- Yes
- No

Where do you see difficulties in conducting internal quality controls? *

Please select all applicable answers:

- Temporal effort
- Financial effort
- Lack of user skills
- Missing staff
- Insufficient awareness of the importance of internal quality controls
- Other:

How important are internal quality controls for quality assurance? *

Please select only one of the following answers:

- Extremely important
- Very important
- Relatively important
- Somewhat important
- Not important

Are you participating in ring tests? *

Please select only one of the following answers:

- Yes
- No

Which kind of interlaboratory tests do you participate in? *

Answer this question only if the following conditions are met:

Answer was “Yes” to question '80 [ring tests] '(Do you attend interlaboratory tests?)

Please select only one of the following answers:

- Participation only in compulsory proficiency testing
- Participation in both compulsory and voluntary proficiency testing

Where do you see difficulties in conducting inter-laboratory tests? *

Answer this question only if the following conditions are met:

Answer was “Yes” to question '80 [ring tests] '(Do you attend interlaboratory tests?)

Please select all applicable answers:

- Sample amount
- Shipping
- Commutability (interchangeability)
- Evaluation
- Interpretation of the evaluation
- Transmission of the measured results
- Other:

Do you evaluate inter-laboratory tests over time? *

Answer this question only if the following conditions are met:

Answer was “Yes” to question '80 [ring tests] '(Do you attend interlaboratory tests?)

Please select only one of the following answers:

- Yes
- No

How important are ring tests for quality assurance for you? *

Answer this question only if the following conditions are met:

Answer was “Yes” to question '80 [ring tests] '(Do you attend interlaboratory tests?)

Please select only one of the following answers:

- Extremely important
- Very important
- Relatively important
- Somewhat important
- Not important

Postanalysis

Is an identification of the user possible? *

Please select only one of the following answers:

- Yes
- No

How is the identity assurance of the user regulated? *

Answer this question only if the following conditions are met:

Answer was “Yes” to question '85 [identuser] '(Is an identification of the user possible?)

Please select all applicable answers:

- Personal employee identification (e.g., smart card) before using the POCT device
- Signature of the user for findings
- Manual input on the POCT device
- Other:

How is it ensured that only adequately trained users operate the POCT devices? *

Please select all applicable answers:

- The device can be operated by anyone (without identification)
- Activation of the device by personal employee identification (e.g., chip card)
- Other:

How is the identity assurance of the patient regulated? *

Please select all applicable answers:

- Barcode labels
- Labeling on findings
- Manual input on the POCT device
- Other:

Are the values from POCT measurements specifically marked? *

Please select only one of the following answers:

- Yes
- No

Are there any values that require repeat measurements? *

Please select only one of the following answers:

- Yes
- No

How often do you need to do repeat measurements? *

Answer this question only if the following conditions are met:

Answer was “Yes” if question '90 [value point measurement] '(Are there values where repeat measurements have to be performed?)

Please select only one of the following answers:

- Always
- Often
- Occasionally
- Rarely
- Never

Are the analytes determined by POCT also determined by another method? *

Please select only one of the following answers:

- Yes, to all
- Yes, partly
- No

Are both methods using the same reference values? *

Answer this question only if the following conditions are met:

Answer was “yes to all” or “yes, partly” to question '92 [value method comparison]' (Are the analytes determined by POCT also determined by another method?)

Please select only one of the following answers:

- Yes
- Yes, partly
- No

Was a correspondence between the two methods checked with regard to the measurement results? *

Answer this question only if the following conditions are met:

Answer was “yes to all” or “yes, partly” to question '92 [value method comparison]' (Are the analytes determined by POCT also determined by another method?)

Please select only one of the following answers:

- Yes
- No

How was the consistency of the methods checked?
Answer this question only if the following conditions are met:

Answer was “Yes” to question '94 [value method]' (Was a match between the two methods regarding the results checked?)

Please enter your answer here:

Where and how are the POCT results documented? *

Please select all applicable answers:

- Medical record of the patient
- Other:

Where and how are the POCT results documented? *

Please select all applicable answers:

- Medical record of the patient
- Other:

How do you rate the quality of POCT results in your workplace in general? *

Please select only one of the following answers:

- Very well
- Rather good
- Medium
- Rather bad
- Very bad

What do you think are common sources of errors when using POCT devices? *

Please enter your answer here:

Outlook

Do you support the increased use of POCT methods? *

Please select only one of the following answers:

- Yes
- Mostly yes
- Partially
- Mostly no
- No

Why are you rejecting the increased use of POCT (rather)? *

Answer this question only if the following conditions are met:

Answer was “Mostly no” or “No” at question '99 [supporting]' (Do you support the increased use of POCT methods?)

Please enter your answer here:

Why are you only partially supporting the increased use of POCT? *

Answer this question only if the following conditions are met:

Answer was “Partial” on question '99 [supportingpoct]' (Do you support the increased use of POCT methods?)

Please enter your answer here:

Why do you support the increased use of POCT? *

Answer this question only if the following conditions are met:

Answer was “yes” or 'sooner yes' to question '99 [supporting]' (Do you support the increased use of POCT methods?)

Please enter your answer here:

Do you think that the increased use of POCT methods will relieve or burden certain occupational groups more? *

Please select all applicable answers:

- Some occupational groups are more relieved
- Some occupational groups are more heavily burdened
- Neither

In your opinion, which occupational groups are increasingly relieved by the future use of POCT methods? *

Answer this question only if the following conditions are met:

Answer was “Some occupational groups are more relieved” when asked '103 [relief burden]' (In your opinion, are more occupational groups relieved or burdened by the increased use of POCT methods?)

Please select all applicable answers:

- Members of the nursing team
- Doctors
- MTAs
- Members of medical technology
- Members of an outpatient nursing service
- Members of the pharmacy
- Other:

In your opinion, which occupational groups are increasingly burdened by the future use of POCT methods? *

Answer this question only if the following conditions are met:

The answer was “Some occupational groups are more heavily burdened” when asked '103 [relief burden]' (In your opinion, are more occupational groups relieved or burdened by the increased use of POCT methods?)

Please select all applicable answers:

- Members of the nursing team
- Doctors
- MTAs
- Members of medical technology
- Members of an outpatient nursing service
- Members of the pharmacy
- Other:

How do you assess the interdisciplinary cooperation in carrying out POCT measurements? *

Please select only one of the following answers:

- Very good
- Good
- Mediocre
- Bad
- Very bad

How can you improve cooperation?

Answer this question only if the following conditions are met:

Answer was “Mediocre” or “Bad” or “Very bad” on question '106 [collaboration]' (How would you rate interdisciplinary cooperation in performing POCT measurements?)

Please enter your answer here:

In your opinion, which factors are decisive for POCT being used profitably? How could one avoid additional burdens?

Please enter your answer here:

What expectations and demands do you place on future innovations in the POCT area?

Please enter your answer here:

Are there other important points you would like to share?

Please enter your answer here: