

Comments. Which Tests Should Be Decentralized to the Primary Health Care?

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In order to find out the need for laboratory investigations to be performed locally or sent to the central hospital we have regular contacts with physicians in primary care. Since 25 years we have registered their ordering habits. After discussions we have decided which investigations we at present think are meaningful in different clinical situations. With respect to the techniques available today we have suggested which tests that are suitable for local analyses and which should be sent to the hospital laboratory. Continuous re-evaluations are made during meetings with local district physicians and during 5-day postgraduate courses for primary health care doctors and clinical chemists which have taken place every half year since 15 years.

The present list of laboratory tests physicians would like to have performed locally according to clinical needs includes:

B-Erythrocyte sedimentation rate (B-ESR)
B-Hemoglobin (B-Hb)
U-Albumin, U-Glucose (teststrips)
(U-Hemoglobin, U-Acetoacetate, U-Nitrite teststrips)
B-Glucose
B-, U-Cells, microscopy
B-Coagulation factors (Prothrombin complex)
Pt-Bleeding time
S-Potassium
S-C-reactive protein (CRP)
S-Creatinine
S-ALAT, S-GT, S-ALP, S-Bilirubin, S-Amylase, S-Ca, S-CKMB
S-Cholesterol, fS-Triglycerides, B-HbA_{1c}, S-Theophylline
U-Density

U-Albumin

U-Human Chorionic gonadotropin (U-hCG)

F-Hemoglobin

The list reflects present Swedish practice but varies locally. Some of these tests are not needed for immediate action. However, some physicians in health care want e.g. serum cholesterol or GT because they want to discuss the test results directly with the patient.

Factors like distance to the central laboratory, communications, number of analyses, training of personnel etc are important.

In order to give room for the new analyses we decided to reduce the number of tests with limited value, e.g. blood leucocyte counting. Other laboratory investigations that were substantially diminished in number were B-ESR, urine microscopy, S-ASAT, S-Bilirubin, S-Urate and S-Sodium. In fact the total number of tests ordered by the physicians on two health centres was reduced by 30-50 per cent after my information and discussions concerning optimal use of clinical chemistry. The format for ordering tests has an impact. There are also very great differences between physicians. Continuous, practically oriented education and information from clinical chemists are necessary.

We have asked patients and physicians about how soon they want to know the test results. The advantage of the new techniques is the offering of immediate answers when the physician and the patient are in personal contact. The laboratory test results can be evaluated immediately, together with other medical information. After further questions and investigations diagnostic decisions can be made without delay. The patients are saved travelling time. The personnel is saved work with specimen handling for postal transport. The secretaries are saved clerical work. The physicians have the opportunity to make a final decision without extra communication by telephone or letter. Undoubtedly all types of people concerned are willing to pay well for this service. However, money is invested well only when the

information obtained is clinically relevant and reliable. "Clinical" comes from the Greek word kline which means bed. Thus literally clinical chemistry means bedside chemistry. Thanks to new techniques this is now a reality.

There is no definite answer to the question "Which tests should be decentralized to the primary health care?" We have here discussed some factors that must be considered. The clinical need for nearer patient testing is definitely the most important. The clinical chemist must take the responsibility for the evaluation of the effects of the new techniques. Continuous discussions between clinical chemists and physicians are necessary. There is a great need for education of the personnel in primary health care and regular quality control systems must be established.

In summary: The goal must be to do correct tests as well as to do tests correctly.

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