

Current Trends in the Collaboration of Primary Health Care and Clinical Chemistry in the Nordic Countries

Mogens Hørder

Department of Clinical Chemistry, Odense University Hospital, Odense, Denmark

ABSTRACT

The way laboratory medicine is provided in primary health care depends on medical needs, organization of the health care system, development in technology and training and skill of personnel. This has also been recognized by general practitioners, clinical chemists and health administrators of the five Nordic countries. Together they have proposed guidelines for the utilization, provision, quality assurance and training of laboratory medicine as part of primary health care. The proposed guidelines resulted from a joint Nordic project by NORDKEM.

INTRODUCTION

The role of laboratory medicine in primary health care is undergoing rapid changes. Two recent developments have generated new perspectives for clinical chemistry in particular. One of those, the production and marketing by industry of apparently robust equipment with low analytical capacity, could seem to be the most important. Much more significant is probably another trend in the development of the overall health care system, i.e. the upgrading of the role of primary health care. The way these two developments may influence the role of laboratory medicine in primary health care is not the same in all parts of the industrialized world. In the Nordic countries general medicine is an integrated part of a non-profit health care system. The opportunities to be obtained in such system from the new patient-near technology cannot be assessed from its analytical performance only. An assessment should also consider the true medical needs in primary health care, the organization and economy of

health care, **quality requirements**, and the **skill and education of personnel**.

These connexions were recognized by the board of the Nordic project for clinical chemistry (NORDKEM) who in 1984 decided to support a project on the future role of laboratory medicine in primary health care in the Nordic countries. In Denmark, Finland, Iceland, Norway and Sweden working groups consisting of representatives from general medicine, clinical chemistry and health administrators were established. The groups described the current status and future goals for each of the countries. In late 1985 the group reports were discussed at a joint Nordic conference. Agreement was reached by the conference participants on present and future guidelines for the role of laboratory medicine in primary health care.

GUIDELINES FOR THE COLLABORATION OF
PRIMARY HEALTH CARE AND CLINICAL CHEMISTRY
IN THE NORDIC COUNTRIES

In the following a synopsis of the guidelines will be presented. A full report is available from NORDKEM (adress: Kivelä Hospital, SF-00260 Helsinki 26, Finland).

Due to the growing importance of general medicine in the control of chronic diseases the need for laboratory information is changing. Also in prevention an diagnosis of disease will there be new needs for laboratory information in general medicine. In primary health care quite different prevalences of diseases and less prominent states of chronic diseases occur as compared to hospital clinics. Therefore **general practitioners and clinical chemists within a region together should describe and publish - as rules of thumb - selected laboratory information that are valuable in dealing with major clinical problems in general practice**. By regularly intervals revision should be made considering changes in medical as well as analytical prerequisites. Such guidelines for appropriate laboratory information in primary health care should be coordinated with those that are used in specialized hospital clinics; the object being to ensure that they fit a common strategy for care of health problems by primary and hospital clinics. Clinical chemistry should be involved in this coordination of application of laboratory medicine on various levels of the health care system.

The access to information from hospital departments of clinical chemistry for primary health care should not be restricted. The kind and number of

laboratory data that are necessary for the general practitioners may differ due to variation of the frequency and severity of diseases in geographical regions. 24 hours service should be provided if necessary. The delivery of blood and other materials for investigation from primary health care centers to the hospital laboratories should be organized to ensure stability of the components and minimal time for transport. The way answers are referred from the laboratory to the general practitioner should fulfill the needs for easy and unequivocal interpretation.

General practitioners and other doctors of primary health care centers should ask clinical chemists of their region for **assistance before the establishment of analytical facilities** in their offices. The kind of advice provided by the clinical chemists should form the basis for selection of the kind of analysis and the necessary equipment and reagents. Training of personnel and the safety of laboratory work should also be considered. Once established the collaboration on analytical work between the staff of primary health care centers and the clinical chemistry of the region should be continued.

As for analytical work in hospital departments of clinical chemistry **quality assurance** must be part of laboratory medicine of primary health care. It should be organized in close collaboration with clinical chemistry of the region. The quality assurance should consist of **external quality assessment** to ensure comparability of data. An appropriate system for **internal quality control** of analytical work in the primary health care office must also be arranged.

Training of personnel of primary health care in those procedures they perform must take place. Clinical chemistry of the region may provide most of this **education**. The level and content of the training programme depends on the amount of laboratory procedures performed, e.g. blood drawing and specimen procurement only or also analytical work with quality assurance. On the other hand the staff of clinical chemistry should learn about the working conditions in primary health care to be able to provide the appropriate kind of service.

Improvement in the utilization of laboratory medicine in primary health care according to these guidelines should be stimulated and ensured by **laws and regulations** on the way primary health care and laboratory medicine play their roles in the health system.

COMMENTS

Even though the organization of primary health care of the five Nordic countries is not exactly identical agreement on these guidelines was soon reached among representatives from general medicine, clinical chemistry and health administration. It seems important to stress that none of the parts have been bound by these guidelines as a legal obligation. The way the mutual collaboration is established differs among regions due to variation in geography, needs of the population, professional interests and enthusiasm, tradition etc. In many regions of the Nordic countries collaboration between primary health care and clinical chemistry similar to that described by these guidelines has already been established. The guidelines should therefore not be considered as the ultimate goals for the future. They rather represent the synthesis of existing experiences. But as published guidelines by the three parts of interest: general medicine, clinical chemistry and health administration they will undoubtedly accelerate the establishment of appropriate laboratory medicine in all parts of primary health care in the Nordic countries.