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Improving and Strengthening the use of ICD 10 and Medical Record System in India

A Case Study (2004 & 2005)

Report and Recommendations



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FOREWORD

The International Statistical Classification of Diseases and Related Health Problems 10th version (ICD 10) is the international standard prescribed by World Health Organisation. Countries need to adopt and implement this classification so that the morbidity & mortality databases are comparable within the various region/states of the country and between countries of region/world. Such reliable information are essential for meaningful conclusion on the health status of the population and for planning the development of facilities for medical and health care and their efficient functioning. ICD 10 coding was introduced by WHO in the year 1993 and India adopted the same in the year 2000. India is to move alongwith the other countries of world. CBHI's continuing efforts to promote use of ICD 10 will yield results only if all the medical & health authorities decide to implement ICD 10 and work towards it.

A case study on ICD 10 involving 20 Delhi & Rohtak hospitals belonging to various management categories, as undertaken by Central Bureau of Health Intelligence (CBHI) with the WHO Biennium 2004-2005 support is an appropriate effort in this direction. This case study involved the Medical Record Officers, heads of Medical Record Departments, Medical Superintendents of the hospitals and other administrative authorities. These officials and authorities who were oriented on the importance of implementing ICD 10, committed to provide the requisite support and logistics to the Medical Record Departments for efficient use of ICD 10 coding system. Through workshops, review meetings and visits to the medical establishments during this case study; the issues and constraints influencing the use of ICD 10 were identified and deliberated in detail on their feasible solutions. This study has come out with valuable recommendations for improved use of ICD 10 as well as strengthening the Medical Record Departments in the country.

Implementation of ICD 10 system necessitates continued sincere efforts in the form of orientation training programmes and computerized Medical Record System Departments in all medical & health institution. From 2005 onwards, CBHI has taken the important initiatives of conducting short term national level Orientation Training Courses on ICD 10. CBHI has also developed a Module and Workbook for Orientation Training on ICD 10 which serves as a handy self learning material for all concerned medical, nursing & paramedical personnels.

I hope that all the concerned medical & health authorities of various states/UTs as well as medical/health institutions will make every effort to efficiently implement the recommendations of this case study.


(Dr. R.K.Srivastava)

Executive Summary

Hospital records coded uniformly using ICD 10 form a vast data base and conclusions drawn on the processed data are extremely important for understanding the public health situation of the country. World Health Organisation (WHO) brought out the 10th version of International Statistical Classification of Diseases and Related Health Problems (ICD 10) in 1993 for systematic coding of morbidity and mortality causes in the medical records of medical/health institutions. India adopted this classification in the year 2000. Five years have gone by since the adoption of ICD 10 in India and evaluation of the implementation and use of ICD 10 by the Medical and Health Institutions needed to be done, in order to examine the extent of use of ICD 10, various problems, constraints and bottlenecks experienced and to come out with a model for improving and strengthening the use of ICD 10 and Medical Record System in the country and to assess the practical training needs and identify the processes which need to be initiated / speeded up to gear up the proper use of ICD 10. For this purpose, CBHI undertook a case study of 20 hospitals in Delhi and Rohtak under the aegis of WHO/GOI Biennium 2004 and 2005.

This case study of 20 hospitals in cities of Delhi and Rohtak spanning over the various management categories such as Central Government, State Government, Local Bodies and Private Sector consisted of the following well thought of initiatives :

1. Workshop of key trainers on ICD 10 from cities of Delhi and Rohtak (New Delhi : 21-23 July 2004)
2. First Review Meeting of key trainers on the action plan and efforts made to improve and strengthen the use of ICD 10 and identification of the major constraints and technologic requirements (New Delhi : 03 September 2004)
3. Visit of experts to the study hospitals for on the spot assessment on the status as well as techno-operational and administrative constraints in the use of ICD 10 (11-14 October 2004)
4. Second Review meeting of Key Trainers on ICD 10 and the Incharges of Medical Record Department to review the implementation of the action plan for improving the use of ICD 10 and strengthening the medical record system (New Delhi : 17 November 2004)
5. Review Workshop of key trainers on the major actions undertaken in order to improve the regular use of ICD 10 as well as to strengthen the MRD in the hospital (New Delhi : 25 January 2005)

The workshop of key trainers on ICD 10 was conducted during 21-23 July 2004 at conference room of YMCA New Delhi. In this workshop, **Medical Record Officers/Officials of 20 study hospitals from Delhi and Rohtak (Post Graduate Institute)** participated. These hospitals belong to various management categories such as Centre, State, Local Bodies and Private Institutions. During this workshop, the participants were introduced to - ICD 10 rules for morbidity and mortality coding and experiences of ICD 10 use in South East Asia Region. Through group work and self work sessions, the measures for improving and strengthening the use of ICD 10 in each hospital were discussed and the participants drafted the hospital specific action plan, logistics and support requirements for efficient use of ICD 10. Resource persons were drawn from World Health Organisation Country Office, South East Asian Regional Office of World Health Organisation (SEARO), Ministry of Statistics and Programme Implementation, All India Institute of Medical Sciences, Office of Registrar General of India (RGI), Maulana Azad Medical College (MAMC) and State Bureau of Health Intelligence (SBHI), New Delhi.

The follow up first review meeting of all those **representatives from 20 study hospitals who participated in the July 2004 workshop**, was held on 3rd Sept. 2004 at Resource Centre, Dte.GHS/GOI, Nirman Bhawan, New Delhi wherein the participants made presentations on the efforts made towards the use of ICD 10 and/or its further improvement in the Hospitals, major problems and constraints experienced (with feasible solutions) to operationalise and/or improving use of ICD 10 and further support and logistics required from Hospital Administration and CBHI for ensuring better use of ICD 10 in the hospitals. During the afternoon session, the participants were taken to Indraprastha Apollo Hospital, New Delhi for demonstration of computerized system of coding and maintaining medical records. The ICD 10 (3 volumes) were provided to all those hospitals which did not have the same in their Medical Record Departments (MRD). Also, a self work in three groups on "Action plan, logistics and support requirements for efficient use of ICD 10 in their hospital and suggestion in workbook on ICD 10 training were done. Experts and resource persons were from MAMC and office of RGI.

Subsequently the **6 hospitals of the case study** where no coding system of Medical Records was being used were visited by CBHI officers during 11-14 October 2004 for on the spot assessment and discussions with hospital authorities and MRD officials. The very purpose of this visit

was to recognise the constraints and problems which were preventing the Medical Record Department of the hospitals from effectively using ICD 10 coding in the Medical Records/System. Also, the current status on the use of ICD 10 and their further plans on its implementation were discussed. Suggestions were given by visiting CBHI officer to the Medical Record Department officials for effective use of ICD 10 in the hospital.

The **2nd review meeting on implementation of ICD 10** of these 20 hospitals was held on 17th November 2004 (1000-1800 hrs) in Conference Room of NIHF, New Delhi. During this 2nd review meeting, **the medical officer/ authority incharge of Medical Record Deptt. from 20 study hospitals** were also invited alongwith the Medical Record Officials who participated in the earlier workshop and review meeting. The efforts made by the hospital authorities for implementing ICD 10 and action taken to handle major problems and constraints and further support and logistics required from hospital authorities and CBHI for ensuring continued use of ICD 10 were discussed, which was followed by self work session in which each hospital identified specific issues requiring further attention for coding the morbidity and mortality records according to ICD 10 and prepared hospital specific action plan to address these issues. The "ICD 10 (3 volumes)" on CD-ROM were provided to all the Govt. hospitals for facilitating the use of ICD 10.

As already planned, in the final stage of this case study on ICD 10, review and concretization of the actions undertaken by the hospitals was done in order to come out with a model to improve and strengthen the use of ICD 10 in the country. The review workshop was organized on 25th January 2005 (0930-1730 hrs) at India Habitat Centre, New Delhi, wherein the (i) **hospital authorities viz. Medical Superintendents and Medical Officer Incharges of Medical Record Departments of the 20 study hospitals from Delhi and Rohtak**, (ii) **administrative authorities of Govt. under which these hospitals function viz.** DHS of NCT of Delhi, Medical Officer of Health from MCD and NDMC, (iii) Director Medical and Health Services of Railways and ESI, (iv) Director CGHS/ Dte.GHS, as well as (v) experts from WHO and various partners i.e. RGI, Ministry of Statistics and Programme Implementation, Medical College(s), concerned authorities for MOHFW and Dte.GHS/GOI, deliberated and made far reaching recommendations for improved use of ICD 10 in future.

The Proceedings of the individual workshops and review meetings are attached as Annexure I, II, III, IV and V respectively. The copies of Technical Presentations are also annexed. Major recommendations as emerged during the deliberations of the different activities of the case study are summarized in the next few pages. The implementation of these recommendations will definitely result in improved use of ICD 10 in the medical/health institutions across the country.

Major Recommendations

A. Essential use of ICD 10

1. All Government and Private health and medical institutions in the country should essentially use ICD 10 in their records and reports and the same should be ensured by all concerned authorities through well designed guidelines, directives and continued monitoring.

[Action : Centre and States/UTs]

2. All medical and health institutions, including hospitals of any size, in the country should equip themselves with WHO publication on ICD 10 (3 volumes) as a reference and ICD 10 codes relevant to each medical specialty be prominently made available in concerned wards in the hospitals. No medical record should remain without ICD 10 code for the diagnosed disease.

[Action : Centre, States/UTs and Respective Medical and Health Authorities]

3. CBHI should be appropriately further strengthened and equipped to efficiently function as National

Nodal Institute on ICD 10 with the objective of further strengthening use of ICD 10, its continuous monitoring, evaluation and capacity building including creation of Master Trainers.

[Action : CBHI]

4. WHO may consider setting up of WHO Collaborating Centre on Family of International Classification of Diseases and Related Health Problems for SE Asia Region, on priority basis, at CBHI, Dte. General of Health Services, Govt. of India, New Delhi

[Action : WHO and CBHI]

B. Manpower Capacity Building for ICD 10 Use

5. All State/UT authorities should formulate a plan for regular orientation training on the use of ICD 10 and every medical and health institution should make efforts to keep their medical/nursing/paramedical staff duly oriented on ICD 10 through well drawn and regularly conducted Orientation Programs in their institutions.

[Action : States/UTs and Respective Medical & Health Authorities]

6. The syllabi and curricula of undergraduate and postgraduate medical as well as paramedical courses in India should appropriately cover the teaching on ICD 10 and its appropriate use.

[Action : All concerned Councils]

C. Operational Plan for implementation of ICD 10, its Monitoring and Evaluation

7. States/UTs should set up a task force for time-bound implementation and monitoring of ICD 10 use. They should maintain a database of various medical and health institutions using/not using ICD 10 and ensure that all these institutions use ICD 10.

[Action : States/UTs]

8. WHO may develop offline software package for ICD 10 coding of disease nomenclatures and provide it for its use in various medical/health institutions in India. Computerised user manual/self learning module for ICD 10 may be prepared and circulated through website of CBHI. Further, online help and a newsletter on ICD 10 aspects may be established through CBHI website. CBHI should make an inventory of all such vendors which are involved in designing the health information system using ICD 10 and share the list with States/UTs for getting the institution specific hospital information system designed through a suitable agency.

[Action : CBHI and WHO]

9. Directives need to be issued from heads of the medical/health institutions to all concerned Medical/Nursing/Paramedical personnel of all departments in the medical/health institutions for ensuring completion of medical records of both outpatient and inpatient departments, and for clearly writing diagnosis using standard medical terminology, while avoiding the abbreviations.

[Action : States/UTs and Respective Medical and Health Authorities]

10. Data on morbidity/mortality based on Medical Records should be regularly compiled, analysed and should form the part of various documents/reports of the medical/health institutions including their annual report.

[Action : States/UTs & Respective Medical and Health Authorities]

11. There should be regular visits / interaction by CBHI to facilitate the speedy implementation of ICD 10 in the States/UTs.

[Action : CBHI & States/UTs]

D. Strengthening Medical Record Unit/Department and Computerised Medical Record System

12. The medical record system in each medical/health institution should be computerized with appropriately designed software for both outpatient and inpatient records, while using meticulously designed formats, local area network as well as internet facility in all the departments/wards of the medical/health institution.

[Action : States/UTs and Respective Medical and Health Authorities]

13. The medical record department in each medical/health institution should be given highest priority and be headed by a senior level expert/officer of the same rank as in other existing technical departments in the same institution. The medical record department should be equipped with requisite number of trained personnel of different categories like medical record officer, Dy. Medical Record Officer, Assistant Medical Record Officer, Sr. Medical Record Technician, Medical Record Technician and other support staff in order to efficiently handle and manage the medical record system of the institution. The standardized staffing pattern of medical record department, keeping in view the bed strength in an institution be worked out by the concerned State/UT authorities and medical record departments in various medical and health institutions be equipped accordingly.

[Action : States/UTs and Respective Medical and Health Authorities]

14. All the technical functionaries in the medical record department be trained through the prescribed training programmes and such training personnel should not be diverted to other departments. The contribution of medical record department functionaries in any of the research papers be duly acknowledged.

[Action : States/UTs and Respective Medical and Health Authorities]

15. There should be clear guidelines for period of retention of medical records for both outpatient and inpatient departments and after the said period, they must be destroyed. This will provide adequate space for the records.

[Action : States/UTs and Respective Medical & Health Authorities]