

Executive Summary

Comparison between ICPC classification and ICD classification at primary care in Korea

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Background

In South Korea, the ICD-10(International Classification of Diseases-10), which was developed by the World Health Organization, was translated, and its translated version has been locally adapted. However, the ICD-10 is appropriate for use only in tertiary hospitals. Thus, a complementary classification is required for primary medical institutions driven by frequent outpatient care. Furthermore, the need for diverse and subdivided healthcare statistics containing reasons for encounter, healthcare processes, diagnosis for the purpose of management, and prevention of diseases at the national level is increasing.

Objective

We examined and analyzed medical records of patients who visited primary care physicians by using the ICPC-2(International Classification of Primary Care-2), which is capable of patient-focused classification, and compared the results with those obtained using the ICD-10. Thereby, this study aimed to determine 1) which between ICD-10 and ICPC-2 is superior, 2) whether the parallel use of the two classifications is needed, 3) whether a third classification is needed, and 4) problems of the current fee-for-service system, under which claims with ICD-10 disease code at

the first day of outpatient visit should be filed at the National Health Insurance Corporation.

Methods

1) A primary care physician survey of family medicine practitioners in Seoul and Gyeonggi areas was conducted, and 2) case records were collected from patients who visited clinics in the same areas.

Results

In 1,099 patients aged 1 to 94 years, the most common response collected regarding the main reason for encounter code according to ICPC-2 was R05(cough), accounting for 14.06% of the total codes. With the ICD-10, the most common disease code was J20(acute bronchitis), accounting for 14.74% of the total codes, whereas with the ICPC-2, R74(upper respiratory infection acute) was the most common first disease code, accounting for 15.92% of the total codes. As the number of comorbid codes according to the ICD-10 increased, the total number of disease codes according to the ICPC-2 also increased. With the ICD-10, patients with more than 4 diagnoses accounted for 35% of the total subjects, whereas with the ICPC-2, these patients accounted for less than 4% of the total subjects. In the comparison of disease status according to body system, the proportion of gastrointestinal disease-related disease codes with the ICD-10 was 16%(400, 244 individuals) of the total codes, which is relatively higher than the 12%(202, 164 individuals) with the ICPC-2. In the analysis of process codes with the ICPC-2, the number of patients who received drug prescriptions for gastrointestinal disease(D50) was 123 and the number of those who received counseling treatment was 11%(n = 10) of the hypertensive patients(n = 93).

In a additional survey of 26 physicians, the respondents reported that they were more accustomed to using the ICD-10 than the ICPC-2 but acknowledged that the ICPC-2 is more useful for patient care and accurately reflects the treatment process.

□ Discussion & Conclusion

The ICPC-2 is a classification that can supplement the drawback of the existing ICD-10 and thus should be gradually introduced. To achieve this, the ICPC-2 can be considered in parallel with the ICD-10. That is, at the beginning of outpatient care, the ICD-10 can be used with the ICPC-2, and at the end of outpatient care, ICPC-2 disease codes can be entered with ICD-10 disease codes for reimbursement claims. In addition, a program that can automatically convert ICPC-2 disease codes to ICD-10 disease codes can be developed.

These measures can compensate drawbacks such as the need for additional administrative time and efforts with the use of the ICPC-2 and allow us to obtain more accurate data that would enable the administration of more effective treatments. In addition, these measures may allow us to emphasize primary care areas such as prevention and counseling to both, patients and physicians; this can contribute in improving the quality of primary care.

International Classification of Primary Care, International Classification of Diseases, outpatient, clinical content, ICPC, ICD