Drug Utilization Review

Health Insurance Review & Assessment Service
www.hira.or.kr
Drug Utilization Review

Drug Utilization Review (DUR) aims to improve drug safety and prevent misuse and abuse of drugs by prescreening inappropriate use of drug (contraindication, therapeutic duplication) in prescription and dispensing.

Characteristics of Korean DUR

DUR is nationwide clinical decision support system. DUR provides patients’ drug use records and real-time warnings by detecting potential adverse effects and unsafe use of drugs at the point of prescribing and dispensing. Providers can crosscheck the drug prescription and dispensing across the nation which enhances the safe use of drugs.

Operation

DUR service starts when the doctor issues a prescription. The doctor enters prescription details into DUR system through his computer which include name of drugs, number of daily doses, administration methods, and number of prescription days. This information is sent to HIRA for the crosscheck with its database (patient’s prescription history, DUR standards such as contraindication). If any issue was found in the prescription, the doctor will receive a warning message from HIRA on the computer screen within 0.5 seconds.

When a warning message pops up, the doctor can decide either to make changes in the prescription or leave a memo as to why the prescriptions should remain as written. The final prescription detail will be sent to HIRA.

When the patient visits a pharmacy with the prescription, the pharmacist goes through the same process. In case there is a warning message, the pharmacist can check with the doctor to dispense as written or make changes. The final dispensing detail will be sent to HIRA.

The information provided through DUR system, which covers 54,000 items, includes drug-drug interaction, age precaution, pregnancy precaution, (benefit) suspended drugs for safety reasons, and ingredient duplication. This information is continuously updated and released on HIRA web site. Among all inspected prescriptions, 4.0% received warning messages. (As of July 2013)
Roles of Each Agency

DUR is being operated in close cooperation between HIRA, the Ministry of Food and Drug Safety, the Ministry of Health and Welfare, and providers.

The Ministry of Food and Drug Safety notifies drug ingredients information such as prohibited drugs and suspended drugs. The Ministry of Health and Welfare notifies benefit standards. HIRA developed DUR system and DUR DB based on DUR standard from the Ministry of Food and Drug Safety and on the guideline from the Ministry of Health and Welfare. HIRA has provided the DUR system to all providers for nationwide implementation. Also, HIRA monitors the operation of DUR to feedback to review department, providers, the Ministry of Food and Drug Safety, and the Ministry of Health and Welfare.

All providers participate in DUR by sending the details of prescription and dispensing to HIRA to improve drug safety.

Cooperation Process between Agencies

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<th>MFDS</th>
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<tr>
<td>Notify ingredients regarding safety</td>
<td>Notify benefit standards regarding safety</td>
<td>Provide real-time information and update DUR DB</td>
<td>Use real-time information when prescribing and dispensing</td>
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