

1. Record Nr.	UNINA9910298544003321
Autore	Gartner Daniel
Titolo	Optimizing Hospital-wide Patient Scheduling [[electronic resource] ] : Early Classification of Diagnosis-related Groups Through Machine Learning / / by Daniel Gartner
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2014
ISBN	3-319-04065-0 3-319-04066-9
Edizione	[1st ed. 2014.]
Descrizione fisica	1 online resource (132 p.)
Collana	Lecture Notes in Economics and Mathematical Systems, , 0075-8442 ; ; 674
Disciplina	330 36.210.681 502.85 519.6 658.40301
Soggetti	Operations research Decision making Health informatics Management science Health care management Health services administration Operations Research/Decision Theory Health Informatics Operations Research, Management Science Health Care Management
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	Introduction -- Machine learning for early DRG classification -- Scheduling the hospital-wide flow of elective patients -- Experimental analyses -- Conclusion.
Sommario/riassunto	Diagnosis-related groups (DRGs) are used in hospitals for the reimbursement of inpatient services. The assignment of a patient to a

DRG can be distinguished into billing- and operations-driven DRG classification. The topic of this monograph is operations-driven DRG classification, in which DRGs of inpatients are employed to improve contribution margin-based patient scheduling decisions. In the first part, attribute selection and classification techniques are evaluated in order to increase early DRG classification accuracy. Employing mathematical programming, the hospital-wide flow of elective patients is modelled taking into account DRGs, clinical pathways and scarce hospital resources. The results of the early DRG classification part reveal that a small set of attributes is sufficient in order to substantially improve DRG classification accuracy as compared to the current approach of many hospitals. Moreover, the results of the patient scheduling part reveal that the contribution margin can be increased as compared to current practice.

---