

Patient Discharge Data Model Data Set (MDS) for Hospitals

Patient Demographics

Data Element	Justification (Uses)
Age in years at Admission	Critical for modeling current and future utilization needs. In association with other demographics, used to assess utilization and use rates for certain diseases.
Age in Days	Critical for modeling current and future utilization needs. In association with other demographics, used to assess utilization and use rates for certain diseases in infants.
Patient's 5-digit ZIP Code	Used to determine access to healthcare and other services. Linked to population forecasts and variation in need for services. Used to define regional service areas.
Patient County Code	Used for studying utilization patterns and forecasting demand at a macro level. Also used like zip code but with much less efficiency.
Type (level) of Care	Useful in facilities planning and model development related to understanding current and future community needs.
Race	Critical in understanding the community need especially related to changing racial profiles and demonstrated variation in healthcare utilization patterns. Combined with other demographics, used to assess utilization and use rates for certain diseases.
Ethnicity	As with RACE, this variable is critical in understanding the community need especially related to changing racial profiles and demonstrated variation in healthcare utilization patterns. Combined with other demographics, used to assess utilization and use rates for certain diseases.
Gender	A key variable in understanding certain variation in healthcare provision and utilization. Used with other demographics used to study utilization and use rates for certain diseases.
Principal Language Spoken	Enhancing hospital operations specific to patient communication training, staffing and monitoring of efficiency.
Expected Principal Source of Payment	Critical in understanding access/barrier issues, especially when used with diagnosis, procedure and demographic variables.
Total Charges	Used as a proxy for resource consumption.
Disposition of Patient	Used to evaluate post hospitalization services.

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Hospital Demographics

Data Element	Justification (Uses)
Hospital ID Number	Used with patient demographics to study access to care and migration patterns, and service areas. Used with length of stay utilization, and outcome to identify best practices and establish benchmarks for quality and performance improvements.
Hospital County	Used with patient demographics to study access to care and migration patterns, and service areas. Used with length of stay utilization, and outcome to identify best practices and establish benchmarks for quality and performance improvements.
Hospital's 5-digit ZIP Code	Used with other patient demographics to study access to care and migration patterns. Used with length of stay utilization, and outcome to identify best practices and establish benchmarks for quality and performance improvements.

Admission/Discharge Information

Data Element	Justification (Uses)
Admission Day/Month/Year	Used in modeling ER and other service utilization patterns. Used in studying seasonal variations in utilization patterns.
Discharge Month	Used in modeling ER and other service utilization patterns. Used in studying seasonal variations in utilization patterns. Also useful in projecting future volumes and predicting staffing requirements.
Length of Stay	A critical measure of utilization by DRG, diagnosis, procedure, level of care. Used in benchmarking analysis for quality and resource consumption.
Source of Admission	Used to study utilization access and utilization patterns.
Type of Admission	Used to understand and ensure access for scheduled and unscheduled admissions for various diagnoses and geographies.

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Diagnostic/Treatment Information

Data Element	Justification (Uses)
Principal Diagnosis	In conjunction with other variables, used to understand the change in age, gender, geographic incidence rates and utilization patterns.
Other Diagnoses	In conjunction with other variables, used to understand the change in age, gender, geographic incidence rates and utilization patterns.
Present on Admission (formerly, Condition Present at Admission)	Used in determining the general health status of patients for resource utilization and benchmarking. In the 2008 data (and forward) this data element changed name, from CPOA_P (Principal) and CPOA1-24 (Other Condition Present on Admission) to PAA_P (Principal) and OPAA1-24. This change in name indicates a change in coding of this data element. Refer to the documentation for the appropriate year for details of the coding changes. In addition, Present on Admission is now reported for E-codes. The new E-code present at admission variables are EPAA_P and EPAA1-4. The need for these new Present on Admission (POA) flags for the External Cause of Injury codes is the same as for the other POA variables.
External Cause of Injury	Used to study incidence and utilization for population based studies.
Do Not Resuscitate (DNR)	Necessary to understand true variation in mortality data at the DRG, diagnosis, procedure, level of care and demographic levels.
Principal Procedure	In conjunction with other variables, used to understand the change in age, gender, geographic incidence rates and utilization patterns. Also in conjunction with diagnoses, used to understand the utilization of current and emerging technology.
Other Procedures	In conjunction with other variables, used to understand the change in age, gender, geographic incidence rates and utilization patterns. Also in conjunction with diagnoses, used to understand the utilization of current and emerging technology.
Days from Admission to Principal Procedure	Used in benchmarking to assess the efficiency of hospital services, processes and quality.
Days from Admission to Other Procedures	Used in benchmarking to assess the efficiency of hospital services, processes and quality.

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Enhancements

Data Element	Justification (Uses)
Major Diagnostic Category (MDC)	In conjunction with other variables, used to understand the change in age, gender, geographic incidence rates and utilization patterns.
Medicare Severity-Diagnosis Related Group (MS-DRG, formerly Diagnosis Related Group or DRG)	In conjunction with other variables, used to understand the change in age, gender, geographic incidence rates and utilization patterns. In 2007, the federal Center for Medicare and Medicaid Services (CMS) changed Grouping Software, adopting the MS-DRG grouper to replace the former DRG grouper. HCAI began using this new grouper beginning with January 1, 2008 discharges.
Grouper Version	CMS changes its Grouper Version starting in October 1 of each year, following the Federal Fiscal Year (October 1 to September 30). Starting with the 2008 data year, each calendar year of HCAI data will utilize the current Grouper Version from January 1 to September 30, and update to the new version on October 1. The Grouper Version identifies the grouper used on a given record. This element is new, starting in 2008; it is a component of the MS-DRG and is used in conjunction with it for the same purpose as the prior DRG data element. It does not supply additional patient information.
MS-DRG Severity Code	Used to determine if the MS-DRG was assigned based on a complication/comorbidity (CC), or a major complication/comorbidity (MCC), or not based on CC or MCC. This is a change from the previous DRG Grouper. This element is new, starting in 2008; it is a component of the MS-DRG and is used in conjunction with it for the same purpose as the prior DRG data element. It does not supply additional patient information.
MS-DRG Category Code	Indicates whether the MS-DRG is Medical, Surgical, or Ungroupable. Provides a means of sub-setting data by these categories. This element is new, starting in 2008; it a component of the MS-DRG and is used in conjunction with it for the same purpose as the prior DRG data element. It does not supply additional patient information.
RLN	Used for longitudinal analysis. Used to study the need and impact of healthcare management strategies.