#### **Quality Data Set Model**

Column 1. STANDARD CATEGORY: component of the QDS standard element that classifies the type of code set	Column 2. QUALITY DATA TYPE: describes how a given standard element is used	Column 3. QDS MODEL VERSION 2 DEFINITION: based on QDS Version 2, which was derived from the HITSP Quality Interoperability Specification (c154 Data Dictionary) and the model developed by the NQF-convened Health Information Technology Expert Panel	<b>Column 4.</b> <b>QDS MODEL VERSION 2.1 DEFINITION:</b> based on feedback received during the QDS Model Version 2 Comment Period in July, 2010 <sup>1</sup>	Column 5. RATIONALE/ COMMENT: indicates change (or no change) in the definition and provides explanation for the revisions
care experience	1	Care experience is information that indicates the degree to which a patient's encounter with the healthcare system was patient-centered. It is the result of the interaction between the various people, processes, and communications undertaken in order to meet the individual's care needs, and is a reflection of the degree to which the patient's needs, preferences and values were incorporated into care decisions. Care experience should include patient and family involvement in the design of care, the extent to which the care meets the patient's needs and preferences, and whether decision making is informed and shared with patients (consumers). <sup>i</sup>		No changes
care experience	patient care experience	Care experience is measured most often with a validated survey tool. The most common tool is the Consumer Assessment of Healthcare Providers and Systems <sup>ii</sup> .		No changes
care experience	provider care experience	Provider care experience gauges provider satisfaction with key structures, processes, and outcomes in the healthcare delivery system. The Medicare Contractor Provider Satisfaction Survey (MCPSS) is designed to gain quantifiable data on provider satisfaction with the performance of Medicare fee-for-service contractors. Most care experience surveys are local. Provider care experience is a factor in provider turnover. A time/date stamp is required.	Provider care experience is expected to determine the provider's experience with availability of resources (e.g., scheduling, equipment, space, and consumables, such as medications, etc.). Provider care experience gauges provider satisfaction with key structures, processes, and outcomes in the healthcare delivery system. Most care experience surveys are local. Provider care experience is a factor in provider turnover. A time/date stamp is required.	Modified data type definition; removed MCPSS reference, and added 'Provider care experience is expected to determine the provider's experience with availability of resources (e.g., scheduling, equipment, space,

<sup>1</sup> In the QDS Model Version 2.1, a time, date, and / or time and date is an attribute for all data types, based on measure requirements' for time/date stamp.

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STANDARDQUACATEGORY:DATcomponent ofdescthe QDSgiven	umn 2. ALITY TA TYPE: cribes how a en standard ment is used	Column 3. QDS MODEL VERSION 2 DEFINITION: based on QDS Version 2, which was derived from the HITSP Quality Interoperability Specification (c154 Data Dictionary) and the model developed by the NQF-convened Health Information Technology Expert Panel	<b>Column 4.</b> <b>QDS MODEL VERSION 2.1 DEFINITION:</b> based on feedback received during the QDS Model Version 2 Comment Period in July, 2010 <sup>1</sup>	Column 5. RATIONALE/ COMMENT: indicates change (or no change) in the definition and provides explanation for the revisions
				and consumables, such as medications, etc.).'
care plan		A goal is a defined target or measure to be achieved in the process of patient care. A typical goal is expressed as an observation scheduled for some time in the future with a particular value. A goal can be found in the plan of care (care plan). The plan of care (care plan) is the structure used by all stakeholders, including the patient, to define the management actions for the various conditions, problems, or issues identified for the target of the plan. It is the structure through which the goals and care planning actions and processes can be organized, planned, communicated, and checked for completion. A time/date stamp is required. Specifically, a care plan is composed of the following elements: - "Problem," which is managed by another standard category (condition/diagnosis/problem) and its related data types. - "Intervention" which is managed by other standard category (categories (may be a procedure, diagnostic test, medication, substance) and their related data types. - The "goal" is what is expected to happen. - The "outcome" is what happened which can be shown by other standard categories and their related data types.	A care plan is composed of a condition, or <i>diagnosis</i> , for which an <i>intervention</i> is planned and performed with a <i>goal</i> (an expected outcome) and an actual <i>outcome</i> . The individual components of a care plan can be managed with existing data types in the QDS model. Specifically, a care plan is composed of the following elements: - 'Problem,' which is managed by another standard category (condition/diagnosis/problem) and its related data types. - 'Intervention,' which is managed by other standard categories (may be an intervention, procedure, diagnostic test, medication, substance, or other categories) and their related data types. - The 'goal' is the expected outcome which can be described using other standard categories and their related data types. A goal is a defined target or measure to be achieved in the process of patient care. A typical goal is expressed as an observation scheduled for some time in the future with a particular value. The 'outcome' is the actual result of the care plan which can be described using other standard categories and their related data types. The plan of care (care plan) is the structure that can be used by all stakeholders, including the patient, to define the management actions for the various conditions, problems, or issues identified for the target of the plan. It is the structure through which the goals and care planning actions and processes can be organized, planned, communicated, and checked for completion. Since each component of a care plan can be expressed using other existing QDS data types, the care plan does not have QDS data types associated with	Modified category title and definition; changed the category title from 'Care goal' to 'Care plan.' The category definition is modified to explain how existing QDS data types can be used to identify the use of a care plan. Care plan as a category does not have its own specific data types. It is composed of diagnosis, intervention, goals and outcome concepts represented in the QDS.

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			it directly. Logic within a measure can provide the linkage of diagnosis, intervention, care goal, and outcome for a care plan. Such linkages are provided in some EHRs using documentation templates.	
<del>care goal</del>	<del>care goal</del>	A goal is a defined target or measure to be achieved in the process of patient care. A typical goal is expressed as an observation scheduled for some time in the future with a particular value. A goal can be found in the plan of care (care plan). The plan of care (care plan) is the structure used by all stakeholders, including the patient, to define the management actions for the various conditions, problems, or issues identified for the target of the plan. It is the structure through which the goals and care planning actions and processes can be organized, planned, communicated, and checked for completion. A time/date stamp is required. Specifically, a care plan is composed of the following elements: - "Problem," which is managed by another standard category (condition/diagnosis/problem) and its related data types. - "Intervention" which is managed by other standard categories (may be a procedure, diagnostic test, medication, substance) and their related data types. - The "goal" is what is expected to happen. - The "outcome" is what happened which can be shown by other standard categories and their related data types.		Removed data type. Care plan 'goal' and 'outcome' are concepts handled as QDS attributes of the existing data types, particularly, 'Intervention' and 'Diagnosis.'
communication		Communication is the transmission, receipt, and/or acknowledgement of information sent from a source to a recipient.		No changes



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communication	communication: provider to provider	The provision of any communication from one clinician to another regarding findings, assessments, plans of care, consultative advice, instructions, educational resources, etc. A time/date stamp is required.		No changes
communication	Communication from patient to provider	The receipt of response from a patient with respect to any aspect of the care provided. A time/date stamp is required.		Modified data type title; added 'to provider' to clarify that communication from patient is to the provider.
communication	communication: from provider to patient	The provision of any communication to the patient. (e.g., results, findings, plans for care, medical advice, instructions, educational resources, appointments, result). A time/date stamp is required.		No changes
condition/diagnos	is/problem	A problem, diagnosis, or condition is a scientific interpretation of result, assessment, and treatment response data that persists over time and tends to require intervention or management. It is used to guide planning, implementation, treatment, and evaluation. A problem or condition includes, but is not limited to chronic conditions, diagnoses, or symptoms, functional limitations, or visit- or stay-specific conditions.	A problem, diagnosis, or condition is a scientific interpretation of result, assessment, and treatment response data that persists over time and tends to require intervention or management, or a clinical feature that is treated, monitored, evaluated, or impacts other treatment or venues of care (e.g., encounters or lengths of stay). It is used to guide planning, implementation, treatment, and evaluation. A problem or condition includes, but is not limited to acute, intermittent or chronic conditions, diagnoses, symptoms, functional limitations, or visit- or stay-specific conditions.	Modified category definition; added the phrase 'or a clinical feature that is treated, monitored, evaluated, or impacts other treatment or venues of care (e.g., encounters or lengths of stay),' and added the phrase 'acute, intermittent, or.'
condition/ diagnosis/ problem	diagnosis, active	An active diagnosis is a problem, diagnosis or condition that is currently monitored, tracked or is a factor that must be considered as part of the treatment plan in progress. A time/date stamp is required.		No changes
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condition/ diagnosis/ problem	diagnosis, family history	Problems, conditions, and diagnoses experienced by a patient's family members whether existing currently or in the past. A time/date stamp is required.		No changes
condition/ diagnosis/ problem	diagnosis, inactive	An inactive diagnosis is a problem, diagnosis, or condition that has been present in the past and is currently not under active treatment or causing clinical manifestations, but may require treatment or monitoring in the future (e.g., a cancer diagnosis in remission). A date/time stamp is required.		No changes
condition/ diagnosis/ problem	diagnosis, resolved	A resolved diagnosis is a problem, diagnosis, or condition that no longer requires treatment and, by its nature is unlikely to recur. A date/time stamp is required.		No changes
condition/ diagnosis/ problem	<del>diagnosis, risk- of</del>	Potential for development of problems or conditions, often determined by a risk calculator scale (See: Risk Category/Assessment). A time/date stamp is required.		Removed data type; Diagnosis, risk of is a compilation of multiple data inputs, each of which can be identified from other data types.
device	1	Device has been defined by the Food and Drug Administration (FDA), Department of Health and Human Services. A device is "an instrument, apparatus, implement, machine, contrivance, implant, in vitro reagent, or other similar or related article, including a component part, or accessory which is: recognized in the official National Formulary, or the United States Pharmacopoeia, or any supplement to them, intended for use in the diagnosis of disease or other conditions, or in the cure, mitigation, treatment, or prevention of disease, in man or other animals, or intended to affect the structure or any function of the body of man or other animals, and which does not achieve any of	Device has been defined by the Food and Drug Administration (FDA), Department of Health and Human Services. A device is "an instrument, apparatus, implement, machine, contrivance, implant, in vitro reagent, or other similar or related article, including a component part, or accessory that is: recognized in the official National Formulary, or the United States Pharmacopoeia, or any supplement to them, intended for use in the diagnosis of disease or other conditions, or in the cure, mitigation, treatment [monitoring or to provide palliative care], or prevention of disease, in man or other animals, or intended to affect the structure or any function of the body of man or	Modified category definition; added the phrase 'monitoring or to provide palliative care.'

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		its primary intended purposes through chemical action within or on the body of man or other animals and which is not dependent upon being metabolized for the achievement of any of its primary intended purposes." This definition provides a clear distinction between a medical device and other FDA- regulated products such as drugs. If the primary intended use of the product is achieved through chemical action or by being metabolized by the body, the product is usually a drug.	other animals, and which does not achieve any of its primary intended purposes through chemical action within or on the body of man or other animals and which is not dependent upon being metabolized for the achievement of any of its primary intended purposes." <sup>2</sup> This definition provides a clear distinction between a medical device and other FDA- regulated products such as drugs. If the primary intended use of the product is achieved through chemical action or by being metabolized by the body, the product is usually a drug.	
device	device, adverse event	In the instance of a quality measure, a device adverse event is an unexpected or dangerous reaction to a device. Serious adverse events are those that are fatal, life-threatening, permanently/significantly disabling, those that require or prolong hospitalization, and those that require intervention to prevent permanent impairment or damage. A time/date stamp is required as are notations indicating whether item is patient reported and/or provider verified.	In the instance of a quality measure, a device adverse event is an unexpected or dangerous reaction to a device. Serious adverse events are those that are fatal, life-threatening, permanently/significantly disabling, those that require or prolong hospitalization, and those that require intervention to prevent permanent impairment or damage, or that require specific treatment, care plan or encounter. A time/date stamp is required as are notations indicating whether item is patient reported and/or provider verified.	Modified data type definition; added the phrase 'or that require specific treatment, care plan or encounter.'
device	device, allergy	A device allergy is an immunologically mediated reaction that exhibits specificity and recurrence on re-exposure to the offending device (e.g., implanted device). A time/date stamp is required as are notations indicating whether the item is patient reported and/or provider verified.	A device allergy is an immunologically mediated reaction that exhibits specificity and recurrence on re-exposure to the offending device (e.g., implanted device), or that impacts or alters treatment, care plan, or encounter. A time/date stamp is required.	Modified data type definition; added the phrase 'that impacts or alters treatment, care plan, or encounter.'
device	device, applied	Indication that equipment designed to treat, monitor, or diagnose a patient's status is in use. (e.g., an antithrombotic device has been placed on the patient's legs to prevent	Indication that equipment designed to treat, monitor, or diagnose a patient's status is in use, or impacts or alters treatment, care plan, or encounter (e.g., an antithrombotic	Modified data type definition; added the phrase 'or impacts

<sup>2</sup> Food and Drug Administration (FDA), Department of Health and Human Services, 2010.

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		thromboembolism, or a cardiac pacemaker is in place.) A time/date stamp is required.	device has been placed on the patient's legs to prevent thromboembolism, or a cardiac pacemaker is in place). A time/date stamp is required.	or alters treatment, care plan, or encounter.'
device	device, intolerance	Device intolerance is a reaction in specific patients representing a low threshold to the normal actions of a device. Intolerance is generally based on patient report and perception of his or her ability to tolerate a device that was properly applied. A time/date stamp is required as are notations indicating whether the item is patient reported and/or provider verified.	Device intolerance is a reaction in specific patients representing a low threshold to the normal actions of a device. Intolerance is generally based on patient report and perception of his or her ability to tolerate a device that was properly applied. A time/date stamp is required.	Modified data type definition; removed 'notations indicating whether the item is patient reported and/or provider verified are required.'
device	device, order	Equipment designed to treat, monitor, or diagnose a patient's status is ordered. A time/date stamp is required.		No changes
diagnostic study	1	A diagnostic test is any kind of medical test performed as a specific test or series of steps to aid in the diagnosis or detection of disease (e.g., to establish a diagnosis, to measure the progress or recovery from disease, or to confirm that a person is free from disease). The QDS defines diagnostic studies as those that are not performed in the clinical laboratory. They may make use of digital images and textual reports. Such studies include but are not limited to imaging studies, cardiology studies (electrocardiogram, treadmill stress testing), pulmonary function testing, vascular laboratory testing, and others.	A diagnostic test is any kind of medical test performed as a specific test or series of steps to aid in the diagnosis or detection of disease (e.g., to establish a diagnosis, to measure the progress or recovery from disease, or to confirm that a person is free from disease). <sup>iii</sup> The QDS defines diagnostic studies as those that are not performed in organizations that perform testing on samples of human blood, tissue or other substance from the body. They may make use of digital images and textual reports. Such studies include but are not limited to imaging studies, cardiology studies (electrocardiogram, treadmill stress testing), pulmonary function testing, vascular laboratory testing, and others.	Modified category definition; added the phrase 'organizations that perform testing on samples of human blood, tissue or other substance from the body.'
diagnostic study	diagnostic study, adverse event	In the instance of a quality measure, a diagnostic study adverse event is an unexpected or dangerous reaction to a diagnostic study. Serious adverse events include those that are disabling, require hospitalization, lead to congenital anomaly, or require intervention to prevent permanent	In the instance of a measure, a diagnostic study adverse event is an unexpected or dangerous reaction to a diagnostic study. Serious adverse events are those that are fatal, life- threatening, permanently/significantly disabling, those that require or prolong hospitalization, those that lead to	Modified data type definition; added the phrases, 'are fatal, life-threatening, permanently/signific
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		impairment or damage. A time/date stamp is required, as are notations indicating whether the item is patient reported and/or provider verified.	congenital anomaly, and those that require intervention to prevent permanent impairment or damage, or that require specific treatment, care plan or encounter. A time/date stamp is required, as are notations indicating whether the item is patient reported and/or provider verified.	antly disabling, those that require or prolong hospitalization' and 'require specific treatment, care plan or encounter.'
diagnostic study	diagnostic study, intolerance	Diagnostic study intolerance is a reaction in specific patients who have a low threshold to the normal reported or expected reactions of the study. Intolerance is generally dependent on patient report and patient's perception of his or her ability to tolerate a properly executed diagnostic study. A time/date stamp is required, as are notations indicating whether the item is patient reported and/or provider verified.	Diagnostic study intolerance is a reaction in specific patients who have a low threshold to the normal reported or expected reactions of the study. Intolerance is generally dependent on patient report and patient's perception of his or her ability to tolerate a properly executed diagnostic study. A time/date stamp is required.	Modified data type definition; removed 'notations indicating whether the item is patient reported and/or provider verified are required.'
diagnostic study	diagnostic study, order	A request by a physician or appropriately licensed care provider to an appropriate provider or facility to perform a diagnostic on a patient. The request may be in the form of a consultation or a direct order to the facility or organization that performs the diagnostic study. Diagnostic studies are those that are not performed in the clinical laboratory. Such studies include but are not limited to imaging studies, cardiology studies (electrocardiogram, treadmill stress testing), pulmonary function testing, vascular laboratory testing, and others. A time/date stamp is required.	A request by a clinician or appropriately licensed care provider to an appropriate provider or organization to perform a diagnostic on a patient. The request may be in the form of a consultation or a direct order to the organization that performs the diagnostic study. Diagnostic studies are those that are not performed in the clinical laboratory. Such studies include but are not limited to imaging studies, cardiology studies (electrocardiogram, treadmill stress testing), pulmonary function testing, vascular laboratory testing, and others. A time/date stamp is required.	Modified data type definition; changed the term 'physician' to 'clinician,' and changed the term 'facility' to 'organization.'
diagnostic study	diagnostic study, performed	A diagnostic study has been completed. Diagnostic studies are those that are not performed in the clinical laboratory. Such studies include but are not limited to imaging studies, cardiology studies (electrocardiogram, treadmill stress testing), pulmonary function testing, vascular laboratory testing, and others. A time/date stamp is required.		No changes
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diagnostic study	diagnostic study, result	The result, described in concepts or numerical values of a diagnostic on a patient. Diagnostic studies are those that are not performed in the clinical laboratory. Such studies include but are not limited to imaging studies, cardiology studies (electrocardiogram, treadmill stress testing), pulmonary function testing, vascular laboratory testing, and others. A time/date stamp is required.		No changes
encounter		An encounter is an identifiable grouping of healthcare-related activities characterized by the entity relationship between the subject of care and a healthcare provider, such grouping determined by the healthcare provider. A patient encounter represents interaction between a healthcare provider and a patient as with a face-to-face patient visit to a clinician's office for any form of diagnostic treatment and/or therapeutic event. Encounters can be billable events but are not limited to billable interactions. Each encounter has an associated location and or modality within which it occurred (such as an office, home, electronic methods, phone encounter, and/or telemedicine methods). The encounter location is the patient's location at the time of measurement. A time/date stamp is required.	An encounter is an identifiable grouping of healthcare-related activities characterized by the entity relationship between the subject of care and a healthcare provider; such grouping is determined by the healthcare provider. <sup>IV</sup> A patient encounter represents interaction between a healthcare provider and a patient with a face-to-face patient visit to a clinician's office, or any electronically remote interaction with a clinician for any form of diagnostic treatment and/or therapeutic event. Encounters can be billable events but are not limited to billable interactions. Each encounter has an associated location and or modality within which it occurred (such as an office, home, electronic methods, phone encounter, and/or telemedicine methods). The encounter location is the patient's location at the time of measurement. A time/date stamp is required.	Modified category definition; added the phrase 'or any electronically remote interaction with a clinician.'
encounter	encounter, order		A request for an encounter, generally by a clinician or appropriately licensed care provider, to an appropriate provider or organization.	Added data type to add description of different types of encounter.
encounter	encounter, performed		An encounter has been completed. The expected performer and recorder of the encounter will vary with the measure.	Added data type to add description of different types of encounter.

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functional status		Functional status is an individual's ability to perform normal daily activities required to meet basic needs, fulfill usual roles, and maintain health and well-being. Decline in functional status is measured by an individual's loss of independence in activities of daily living (ADLs) over a period of time. <sup>v</sup>	Functional status assessment is specific to tools that evaluate an individual patient's actual physical or behavioral performance as an indicator of capabilities at a point in time. The functional status assessment can be used in measurement to determine change in physical or behavioral performance over time, or specific capabilities that cause a patient to be included or excluded from a measurement population. Examples include (but are not limited to): Eastern Cooperative Oncology Group (ECOG) Performance Status, Edmonton Functional Assessment Tool (EFAT), Karnofsky Performance Scale, Katz Index of Independence in Activities of Daily Living, Palliative Performance Scale version 2, the Medical Outcomes Study (MOS) Short Form Survey Instrument (SF-12), and the Asthma Quality of Life Questionnaire. Alternately, 'risk assessment' refers to appraisals of health and well-being, providing information as to the risk for conditions or increased severity of illness (e.g., Braden Skin Scale, Morse Fall Risk Scale, etc.), whereas 'physical exam' includes psychiatric examinations. [ <i>For cross reference, see 'risk category/assessment,'</i> <i>'physical exam' and 'individual characteristic</i> ']	Modified category definition; updated definition, and added examples of functional status assessment tools.
functional status	functional status, order		A request to perform a functional status assessment. The source of the request will vary with the measure.	Added data type for the purpose of clinical decision support and care plans for which more process oriented steps are required.
functional status	functional		A functional status assessment has been completed. The	Added data type for
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	status, performed		expected performer and recorder of the assessment will vary with the measure.	the purpose of clinical decision support and care plans, for which more process oriented steps are required.
functional status	functional status, result		The functional status assessment result value(s). Measures may require a value or a specific range of values to include in the logic.	Added data type for the purpose of clinical decision support and care plans, for which more process oriented steps are required.
Individual charact	teristic	Specific information about the patient, clinician provider, or the facility caring for the patient.	Specific information about the patient, clinician provider, or the organization caring for the patient.	Modified category definition; changed the term 'facility' to 'organization.'
individual characteristic	patient characteristic	Specific information about the patient, such as demographics, religion, income, clinical trial, and comfort measures only. Excludes diagnoses or other concepts more specifically defined by other categories and associated data types. A time/date stamp is required.	Specific information about the patient, such as demographics, religion, income, and clinical trial. Excludes diagnoses or other concepts more specifically defined by other categories and associated data types. Patient characteristics include details about caregiving and whether or not the patient is the primary caregiver for a chronically ill patient. Standardization of caregiving characteristics will be helpful to specify the distinct attributes. A time/date stamp is required.	Modified data type definition; updated definition and removed 'comfort measures only.'
individual characteristic	provider characteristic	Specific information about the clinician provider or the facility caring for the patient. A time/date stamp is required.	Specific information about the clinician, provider, or the organization caring for the patient. Examples of provider characteristics include: degree, education, training, clinical experience, clinical privileges (which are based on	Modified data type definition; added more provider characteristic
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Column 1. STANDARD CATEGORY: component of the QDS standard element that classifies the type of code set	Column 2. QUALITY DATA TYPE: describes how a given standard element is used	Column 3. QDS MODEL VERSION 2 DEFINITION: based on QDS Version 2, which was derived from the HITSP Quality Interoperability Specification (c154 Data Dictionary) and the model developed by the NQF-convened Health Information Technology Expert Panel	Column 4. QDS MODEL VERSION 2.1 DEFINITION: based on feedback received during the QDS Model Version 2 Comment Period in July, 2010 <sup>1</sup>	Column 5. RATIONALE/ COMMENT: indicates change (or no change) in the definition and provides explanation for the revisions
			experience), as well as gender, race, ethnicity, language(s) spoken, age range, practice open or closed, practice types, and location, and other demographic characteristics. Any of these could be used in measures, as in a risk adjustment algorithm. A time/date stamp is required.	examples, and changed the term 'facility' to 'organization.'
Intervention		An intervention is an influencing force or act that occurs in order to modify a given state of affairs. An intervention is any action carried out (by a healthcare provider or a consumer) to improve or maintain the health of a subject of care with the expectation of producing an outcome. Interventions also include patient care processes provided directly to a patient by a care provider to assist or direct a patient with activity or to apply single use or durable medical equipment. Examples include assisted ambulation, behavioral interventions (e.g., counseling), dressing changes, placement of antithrombotic devices, and / or insertion or removal of intravascular access. In the context of behavioral health, an intervention may be any outside process that has the effect of modifying an individual's behavior, cognition, or emotional state. Examples include: Consumer—deep breathing (e.g., for anxiety), vigorous exercise, and other predetermined activities. Note that intervention specifically excludes procedures (e.g., colonoscopy), diagnostic tests (e.g., imaging procedures), treatment with medications, and laboratory testing.	An intervention is an action - treatment, procedure or activity - designed to achieve an outcome. Interventions represent those care activities that can be performed by a clinician, a patient or a caregiver and require supervision, monitoring or communication. Interventions represent a broad category of activities that are distinct from diagnostic tests, procedures, laboratory tests or encounters, each of which is a step in any individual patient's care process. Included are education, communication, behavioral interventions (counseling), physical actions (dressing change, ambulation with or without assistance), use of inhalation devices, provision of nutrition, exercise, use of psychosocial interaction or relaxation techniques, to name a few. To distinguish interventions from the category 'procedures,' procedures can be specifically identified and used in reimbursement schema (e.g., surgical operations, chiropractic manipulation, setting of bone fractures and placement of a cast). Both procedures and interventions can generate a claim for payment, but a claim is not necessarily created. Examples: (1) instruction in walking with crutches is an intervention, yet there is a billing process for reimbursement, (2) periodic oral evaluation and cleaning are procedures (generally performed by a dentist and oral hygienist), yet mouth care is an intervention as it is a routine process performed by a patient, caregiver or clinician. [ <i>For cross reference, see 'procedure</i> ]	Modified category definition; updated definition to distinguish interventions from other standard categories.

STANDARD CATEGORY: component of the QDS	Column 2. QUALITY DATA TYPE: describes how a given standard element is used	Column 3. QDS MODEL VERSION 2 DEFINITION: based on QDS Version 2, which was derived from the HITSP Quality Interoperability Specification (c154 Data Dictionary) and the model developed by the NQF-convened Health Information Technology Expert Panel	<b>Column 4.</b> <b>QDS MODEL VERSION 2.1 DEFINITION:</b> based on feedback received during the QDS Model Version 2 Comment Period in July, 2010 <sup>1</sup>	Column 5. RATIONALE/ COMMENT: indicates change (or no change) in the definition and provides explanation for the revisions
intervention	intervention, adverse event	In the instance of a quality measure, an intervention adverse event is an unexpected or dangerous reaction to an intervention. Serious adverse events are those that are fatal, life-threatening, permanently/significantly disabling, those that require or prolong hospitalization, and those that require intervention to prevent permanent impairment or damage. A time/date stamp is required, as are notations indicating whether an item is patient-reported and/or provider-verified.	In the instance of a quality measure, an intervention adverse event is an unexpected or dangerous reaction to an intervention. Serious adverse events are those that are fatal, life-threatening, permanently/significantly disabling, those that require or prolong hospitalization, and those that require intervention to prevent permanent impairment or damage, or that require specific treatment, care plan or encounter. A time/date stamp is required, as are notations indicating whether an item is patient-reported and/or provider-verified.	Modified data type definition; added the phrase 'or that require specific treatment, care plan or encounter.'
	intervention, intolerance	Intervention intolerance is a reaction in specific patients representing a low threshold to the normal execution of an intervention. Intolerance is generally based on patient report and perception of his or her ability to tolerate a properly executed intervention. A time/date stamp is required as are notations indicating whether the item is patient reported and/or provider verified.	Intervention intolerance is a reaction in specific patients representing a low threshold to the normal execution of an intervention. Intolerance is generally based on patient report and perception of his or her ability to tolerate a properly executed intervention. A time/date stamp is required.	Modified data type definition; removed 'notations indicating whether the item is patient reported and/or provider verified are required.'
	intervention, order	A request by a physician or appropriately licensed care provider to an appropriate provider or facility to perform a service and/or other type of action necessary for care. A time/date stamp is required.	A request by a clinician or appropriately licensed care provider to an appropriate provider or organization to perform a service and/or other type of action necessary for care. A time/date stamp is required.	Modified data type definition; changed the term 'physician' to 'clinician' and changed the term 'facility' to 'organization.'
	intervention, performed	An intervention has been completed. A time/date stamp is required.		No changes
	intervention, result	Intervention results are the findings identified as a result of the intervention. A time/date stamp is required.		No changes
laboratory test		A medical procedure that involves testing a sample of blood, urine, or other substance from the body. Tests can help	A medical procedure that involves testing a sample of blood, urine, or other substance from the body. Tests can help	Modified category definition; added



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		determine a diagnosis, plan treatment, check to see if treatment is working, or monitor the disease over time.	determine a diagnosis, plan treatment, check to see if treatment is working, or monitor the disease over time. <sup>vi</sup> Laboratory tests may be performed on specimens not derived from patients (electrolytes or contents of water or consumed fluids, cultures of environment, pets, other animals). The data types will remain the same.	more information about laboratory tests.
laboratory test	laboratory test, adverse event	In the instance of a quality measure, a laboratory test adverse event is an unexpected or dangerous reaction to a laboratory test. Serious adverse events are those that are fatal, life-threatening, permanently/significantly disabling, those that require or prolong hospitalization, and those that require intervention to prevent permanent impairment or damage. A time/date stamp is required, as are notations indicating whether an item is patient-reported and/or provider- verified.	In the instance of a quality measure, a laboratory test adverse event is an unexpected or dangerous reaction to a laboratory test. Serious adverse events are those that are fatal, life-threatening, permanently/significantly disabling, those that require or prolong hospitalization, and those that require intervention to prevent permanent impairment or damage, or that require specific treatment, care plan or encounter. A time/date stamp is required, as are notations indicating whether an item is patient-reported and/or provider- verified.	Modified data type definition; added the phrase 'or that require specific treatment, care plan or encounter.'
laboratory test	laboratory test, intolerance	Laboratory test intolerance is a reaction in specific patients representing a low threshold to the normal reported or expected reactions of the study. Intolerance is generally based on patient report and patient's perception of his or her ability to tolerate a properly executed laboratory study. A time/date stamp is required, as are notations indicating whether the item is patient reported and/or provider verified.		No changes
laboratory test	laboratory test, order	A request for a study in the clinical laboratory (traditionally chemistry, hematology, microbiology, serology, urinalysis, blood bank) has been ordered. A time/date stamp is required.		No changes
laboratory test	laboratory test, performed	A study in the clinical laboratory (traditionally chemistry, hematology, microbiology, serology, urinalysis, blood bank) has been performed. A time/date stamp is required.		No changes



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laboratory test	laboratory test, result	The result of a study in the clinical laboratory (traditionally chemistry, hematology, microbiology, serology, urinalysis, blood bank). A time/date stamp is required.		No changes
medication	1	A medication refers to clinical drugs or chemical substances intended for use in the medical diagnosis, cure, treatment, or prevention of disease. A medication contains a code derived from code systems such as RxNorm.		No changes
medication	medication, active	Medications currently taken by a patient. A time/date stamp is required.		No changes
medication	medication, administered	A record by the care provider that a medication actually was administered and whether or not this fact conforms to the order. Appropriate time/date stamps for all medication administration are generated.	A record by the care provider that a medication actually was administered. Appropriate time/date stamps for all medication administration are generated.	Modified data type definition; removed 'and whether or not this fact conforms to the order.'
medication	medication, adverse effects	Medication adverse effects refer to conditions that are due to drugs and medical and biological substances when the correct substance was administered as prescribed. <sup>vii</sup> These are generally clinician-identified effects. Medication adverse effects are distinct from medication allergy and intolerance. A time/date stamp is required as are notations indicating whether item is patient reported and/or provider verified.		No changes
medication	medication, allergy	A medication allergy is an immunologically mediated reaction that exhibits specificity and recurs on re-exposure to the offending drug. A time/date stamp is required as are notations indicating whether the item is patient reported and/or provider verified.	A medication allergy is an immunologically mediated reaction that exhibits specificity and recurs on re-exposure to the offending drug. Recurrence on re-exposure is not required to determine the presence of an allergy, but rather is simply a characteristic of an allergy. A time/date stamp is required as are notations indicating whether an item is patient-reported	Modified data type definition; added 'Recurrence on re- exposure is not required to determine the



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			and/or provider-verified.	presence of an allergy, but rather is simply a characteristics of an allergy.'
medication	medication, dispensed	A medication prescription is filled by a pharmacy and the medication has been provided to the patient or patient proxy. In the ambulatory setting, medications are primarily taken directly by patients and not directly observed. Hence, dispensed is the closest health provider documentation of medication compliance. In settings where patients attest to taking medications in electronic format (perhaps a Personal Health Record) patient attestation of "medication taken" may be available. A time/date stamp is required.		No changes
medication	medication, history	Medications taken by a patient in the past; includes discontinued or completed medications. A time/date stamp is required.		Removed data type; the concept is handled through measure logic, using time/date stamps.
medication	medication, intolerance	Medication intolerance is a reaction in specific patients representing a low threshold to the normal pharmacological action of a drug. Intolerance is generally based on patient report and perception of his or her ability to tolerate proper administration of a medication. Medication intolerance is distinct from medication allergy and medication adverse effects. A time/date stamp is required as are notations indicating whether the item is patient reported and/or provider verified.		No changes
medication	medication, order	A request by a physician or appropriately licensed care provider to a pharmacy to provide medication to a patient.	A request by a clinician or appropriately licensed care provider to a pharmacy to provide medication to a patient.	Modified data type definition; changed

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		The request is in the form of prescriptions or other medication orders with detail adequate for correct filling and administration. A time/date stamp is required.	The request is in the form of prescriptions or other medication orders with detail adequate for correct filling and administration. A time/date stamp is required.	the term 'physician' to 'clinician.'
negation rationale		The reasons why an event or service was negated, including a procedure or test that was not given, or a device or substance that was not given or applied. These reasons for negation are typically subdivided to patient, medical, and/or system reasons that are general and non-specific, where a specific QDS data type such as "condition/problem/diagnosis" cannot be pinpointed. Note in the case when a specific condition/problem/diagnosis can be identified as part of the exclusion criteria, then the data type for this specific condition/diagnosis must be added to the measure, simply using the non-specific medical reasons negation rationale data type would be insufficient. Sometimes a measure may require both the general medical reasons as well as the specific medical conditions to be part of the exclusion criteria. Then in such cases, both the negation rationale data types (patient and medical reasons) as well as the condition/problem/diagnosis data types (for the specified medical conditions) must be added.		No changes
negation rationale	communication, not done	The reasons why a set of information was not communicated, transmitted, received, and/or acknowledged. The data type is used when a clear clinical reason cannot otherwise be specified (e.g. such as by using diagnosis, device, diagnostic test, lab test, medication, physical exam, procedure, substance). A time/date stamp is required.		No changes
negation rationale	device, not done	The reasons why a device or equipment designed to treat, monitor, or diagnose a patient's status was not followed through as ordered. The data type is used when a clear		No changes
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		clinical reason cannot otherwise be specified (e.g. such as by using diagnosis, device, diagnostic test, lab test, medication, physical exam, procedure, substance). A time/date stamp is required.		
negation rationale	diagnostic study, not done	The reasons why a diagnostic study was not done. The data type is used when a clear clinical reason cannot otherwise be specified (e.g. such as by using diagnosis, device, diagnostic test, lab test, medication, physical exam, procedure, substance). A time/date stamp is required.		No changes
negation rationale	encounter, not done		The reasons why an encounter did not occur. The data type is used when a clear clinical or patient reason cannot be specified. A time/date stamp is required.	Added data type to allow measures to include exclusion criteria for valid reasons that an encounter did not occur.
negation rationale	functional status, not done		The reasons why a functional status did not occur. The data type is used when a clear clinical or patient reason cannot be specified. A time/date stamp is required.	Added data type to allow measures to include exclusion criteria for valid reasons that a functional status did not occur.
negation rationale	laboratory test, not done	The reasons why a laboratory test, or study in the clinical laboratory (traditionally chemistry, hematology, microbiology, serology, urinalysis, blood bank) was not done. The data type is used when a clear clinical reason cannot otherwise be specified (e.g. such as by using diagnosis, device, diagnostic test, lab test, medication, physical exam, procedure, substance). A time/date stamp is required.		No changes
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negation rationale	medication, not done	The reasons why a medication was not done. The data type is used when a clear clinical reason cannot otherwise be specified (e.g., such as by using diagnosis, device, diagnostic test, lab test, medication, physical exam, procedure, substance). A time/date stamp is required.		No changes
negation rationale	physical exam, not done	The reasons why a physical exam was not done. The data type is used when a clear clinical reason cannot otherwise be specified (e.g., such as by using diagnosis, device, diagnostic test, lab test, medication, physical exam, procedure, substance). A time/date stamp is required.		No changes
negation rationale	procedure, not done	The reasons why a procedure was not done. The data type is used when a clear clinical reason cannot otherwise be specified (e.g., such as by using diagnosis, device, diagnostic test, lab test, medication, physical exam, procedure, substance). A time/date stamp is required.		No changes
negation rationale	substance, not done	The reasons why a substance administration was not done. The data type is used when a clear clinical reason cannot otherwise be specified (e.g., such as by using diagnosis, device, diagnostic test, lab test, medication, physical exam, procedure, substance). A time/date stamp is required.		No changes
physical exam	1	A physical examination is the evaluation of the patient's body to determine its state of health. The techniques of inspection include palpation (feeling with the hands and/or fingers), percussion (tapping with the fingers), auscultation (listening), and smell. Measurements may include vital signs (blood pressure, pulse, respirations) as well as other clinical measures (such as expiratory flow rate, size of lesion, etc.). In addition, this includes psychiatric examinations. (Note: Other social assessments that may pertain to psychiatric conditions belong in the Patient Characteristics category.)	A physical examination is the evaluation of the patient's body to determine its state of health. The techniques of inspection include palpation (feeling with the hands and/or fingers), percussion (tapping with the fingers), auscultation (listening), visual inspection, and smell. Measurements may include vital signs (blood pressure, pulse, respirations) as well as other clinical measures (such as expiratory flow rate, size of lesion, etc.). In addition, this includes psychiatric examinations. (Note: Other social assessments that may pertain to psychiatric conditions belong in the 'Individual characteristics,	Modified category definition; added the phrase 'visual inspection.'
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			patient characteristics' data type category.) [For cross reference, see 'functional assessment,' 'risk category/assessment' and 'individual characteristic']	
physical exam	physical exam, finding	The result or finding of a physical exam. A time/date stamp is required.		No changes
physical exam	physical exam, order	A request by a physician or appropriately licensed care provider to order a physical exam for the patient. A time/date stamp is required.	A request by a clinician or appropriately licensed care provider to order a physical exam for the patient. The data type is expected to be used to identify orders such as "vital signs, frequency every x hours)," or "pedal pulse check, frequency every 15 minutes for x hours." A time/date stamp is required.	Modified data type definition; updated the definition and changed the term 'physician' to 'clinician.'
physical exam	physical exam, performed	A physical exam has been completed. A time/date stamp is required.		No changes
preference		Preference refers to the healthcare treatment choices influenced, but not limited to, language, religious, or cultural preferences. Preference can be driven as well by utility measurement. A health utility index (HUI) is a family of generic health profiles and preference-based systems for the purposes of measuring health status, reporting health-related quality of life, and producing utility scores. Health-related quality of life (HRQL), as defined by Patrick and Erickson, "is the value assigned to duration of life as modified by the impairments, functional states, perceptions, and social opportunities that are influenced by disease, injury, treatment, or policy". HUI questionnaires, designed to elicit responses from a wide variety of subjects, make it easy to incorporate such a patient-reported outcome (PRO) and utility instrument into a clinical study. HUI evolved in response to the need for		No changes



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		a standardized system to measure health status and HRQL to describe: 1) the experience of patients undergoing therapy; 2) long-term outcomes associated with disease or therapy; 3) the efficacy, effectiveness, and efficiency of healthcare interventions; and 4) the health status of general populations.		
preference	patient preference	Health care treatment choices influenced by but not limited to language, religious, or cultural preferences selected by the patient and family. A time/date stamp is required.	Health care treatment choices influenced by but not limited to language, religious, personal or informed choice, or cultural preferences selected by the patient and family. A time/date stamp is required.	Modified data type definition; added the phrase 'personal or informed choice.'
preference	provider preference	Health care treatment choices by the care provider based on knowledge of the patient's clinical status and findings. Synonymous with 'medical reason' for inclusion or exclusion of a patient in a measure population. A time/date stamp is required.		No changes
procedure		A procedure is a course of action intended to achieve a result in the care of persons with health problems. It is generally invasive and involves physical contact. A procedure may be a surgery or other type of physical manipulation of a person's body in whole or in part for purposes of making observations and diagnoses and/or providing treatment. <sup>ix</sup> Some of these procedures are not reimbursed. Note that procedure is distinct from intervention. [ <i>For cross reference, see 'intervention'</i> ]		No changes
procedure	procedure, adverse event	In the instance of a quality measure, a procedure adverse event is an unexpected or dangerous reaction to a procedure. Serious adverse events are those that are fatal, life- threatening, permanently/significantly disabling, those that require or prolong hospitalization, and those that require intervention to prevent permanent impairment or damage. A	In the instance of a quality measure, a procedure adverse event is an unexpected or dangerous reaction to a procedure. Serious adverse events are those that are fatal, life-threatening, permanently/significantly disabling, those that require or prolong hospitalization, and those that require intervention to prevent permanent impairment or damage, or	Modified data type definition; added the phrase, 'or that require specific treatment, care plan
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		time/date stamp is required, as are notations indicating whether an item is patient-reported and/or provider-verified.	that require specific treatment, care plan or encounter. A time/date stamp is required, as are notations indicating whether an item is patient-reported and/or provider-verified.	or encounter.'
procedure	procedure, intolerance	Procedure intolerance is a reaction in specific patients representing a low threshold to the normal execution of a procedure. Intolerance is generally based on patient report and perception of his or her ability to tolerate a properly- executed procedure. A time/date stamp is required as are notations indicating whether the item is patient reported and/or provider verified.	Procedure intolerance is a reaction in specific patients representing a low threshold to the normal execution of a procedure. Intolerance is generally based on patient report and perception of his or her ability to tolerate a properly- executed procedure. A time/date stamp is required.	Modified data type definition; removed 'notations indicating whether the item is patient reported and/or provider verified are required.'
procedure	procedure, order	A request by a physician or appropriately licensed care provider to an appropriate provider or facility to perform.	A request by a clinician or appropriately licensed care provider to an appropriate provider or organization to perform.	Modified data type definition; replaced the term 'physician' with 'clinician' and changed the term 'facility' to 'organization.'
procedure	procedure, performed	A procedure has been completed. Depending on the point in the clinical workflow desired by the measure, various options are provided—ordered, declined, performed, and resulted. Procedures also include patient care processes provided directly to a patient by a care provider to assist or direct a patient with activity or to apply single use or durable medical equipment. Examples include assisted ambulation, behavioral interventions (e.g., counseling provided), dressing changes, placement of antithrombotic devices, insertion or removal of intravascular access. Some of these procedures are not reimbursed. A time/date stamp is required.	A procedure has been completed. Depending on the point in the clinical workflow desired by the measure, various options are provided—ordered, declined, performed, and resulted. Procedures also include patient care processes provided directly to a patient by a care provider to assist or direct a patient with activity or to apply single use or durable medical equipment. Examples include assisted ambulation, dressing changes, placement of antithrombotic devices, insertion or removal of intravascular access. Some of these procedures are not reimbursed. A time/date stamp is required.	Modified data type definition; removed behavioral intervention as an example of a procedure performed.
procedure	procedure, result	Procedure results are the findings identified as a result of the procedure. The result of a surgical procedure documents the		No changes
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		actual procedure performed and the findings of the procedure. These findings are usually present in the operative note (e.g., lymph node dissection with 15 lymph nodes obtained for biopsy). The procedure result is distinct from the pathology report which is a laboratory result data type which could state 2 of 15 nodes positive for malignancy. It is also distinct from clinical outcome which could use various data types (e.g., patient characteristic "alive" at 18 months post-operatively, or functional status data type required pre-operatively and at 6, 12, and 18 months post- operatively). A time/date stamp is required.		
risk category/assessment		Risk category assessments include tools and calculators that suggest vulnerabilities for any given patient. Distinct from functional status, risk categorization uses findings, observations, results and sometimes judgments and patient generated information for use within clinical care algorithms, clinical decision support, and severity analysis. A time/date stamp is required. Examples: Braden Score for Predicting Pressure Score Risk, Morse Fall Risk Scale, Pneumonia Severity Index <sup>x</sup> . [ <i>For cross reference, see functional assessment,' 'physical exam' and 'individual characteristic'</i> ]		No changes
risk category/ assessment	risk category/ assessment	Risk category assessments include tools and calculators that suggest vulnerabilities for any given patient. Distinct from functional status, risk categorization uses findings, observations, results, and sometimes judgments and patient generated information for use within clinical care algorithms, clinical decision support and severity analysis. A time/date stamp is required.		No changes

Column 1. STANDARD CATEGORY: component of the QDS standard element that classifies the type of code set	Column 2. QUALITY DATA TYPE: describes how a given standard element is used	Column 3. QDS MODEL VERSION 2 DEFINITION: based on QDS Version 2, which was derived from the HITSP Quality Interoperability Specification (c154 Data Dictionary) and the model developed by the NQF-convened Health Information Technology Expert Panel	Column 4. QDS MODEL VERSION 2.1 DEFINITION: based on feedback received during the QDS Model Version 2 Comment Period in July, 2010 <sup>1</sup>	Column 5. RATIONALE/ COMMENT: indicates change (or no change) in the definition and provides explanation for the revisions
substance		A chemical element and its compounds in the natural state or obtained by any manufacturing process (other than pharmaceutical drugs), including any additive necessary to preserve its stability and any impurity deriving from the process used, but excluding any solvent which may be separated without affecting the stability of the substance or changing its composition. <sup>XI</sup> Substance may or may not have a code or be classified by a code system such RxNorm. Examples of a substance may include but not limited to: environmental agents (e.g. pollen, dust) and food (e.g., vitamins).		No changes
substance	substance, administered	A record by the care provider that a food or other substance actually was given to the patient and whether or not these facts conform to the order. A time/date stamp is required.		No changes
substance	substance, adverse event	In the instance of a quality measure, a substance adverse event is an unexpected or dangerous reaction to a substance (e.g., food, environmental agent). Serious adverse events are those that are fatal, life-threatening, permanently/significantly disabling, those that require or prolong hospitalization, and those that lead to congenital anomaly or require intervention to prevent permanent impairment or damage. A time/date stamp is required as are notations indicating whether item is patient reported and/or provider verified.	In the instance of a quality measure, a substance adverse event is an unexpected or dangerous reaction to a substance (e.g., food, environmental agent). Serious adverse events are those that are fatal, life-threatening, permanently/significantly disabling, those that require or prolong hospitalization, those that lead to congenital anomaly, and those that require intervention to prevent permanent impairment or damage, or that require specific treatment, care plan or encounter. A time/date stamp is required as are notations indicating whether item is patient reported and/or provider verified.	Modified data type definition; added the phrase 'or that require specific treatment, care plan or encounter.'
substance	substance, allergy	A substance allergy is an immunologically mediated reaction that exhibits specificity and recurrence on re-exposure to the offending substance. A time/date stamp is required as are notations indicating whether the item is patient reported and/or provider verified.		No changes



Column 1. STANDARD CATEGORY: component of the QDS standard element that classifies the type of code set	Column 2. QUALITY DATA TYPE: describes how a given standard element is used	Column 3. QDS MODEL VERSION 2 DEFINITION: based on QDS Version 2, which was derived from the HITSP Quality Interoperability Specification (c154 Data Dictionary) and the model developed by the NQF-convened Health Information Technology Expert Panel	<b>Column 4.</b> <b>QDS MODEL VERSION 2.1 DEFINITION:</b> based on feedback received during the QDS Model Version 2 Comment Period in July, 2010 <sup>1</sup>	Column 5. RATIONALE/ COMMENT: indicates change (or no change) in the definition and provides explanation for the revisions
substance	substance, intolerance	Substance intolerance is a reaction in specific patients representing a low threshold to the normal effects of a substance. Intolerance is generally based on patient report and perception of his or her ability to proper administer a substance. Substance intolerance is distinct from substance allergy and adverse event. A time/date stamp is required as are notations indicating whether the item is patient reported and/or provider verified.		No changes
substance	substance, order	A request by a physician or appropriately licensed care provider to provide food or other substance to a patient. A time/date stamp is required.		No changes
symptom		A symptom is an indication that a person has a condition or disease. Some examples are headache, fever, fatigue, nausea, vomiting, and pain. [Source: UMLS]. Also, subjective of disease perceived by the patient. [Source: NCI] As an example to differentiate symptom from finding, the patient's subjective symptom of fever is distinguished from the temperature (a finding) which has a source of temperature measuring device and recorder of the device (electronically) or an individual (healthcare provider, patient, etc.).		No changes
symptom	symptom, active	An active symptom is a patient's reported perception of departure from normal functioning that is present at the time indicated. A time/date stamp is required.		No changes
symptom	symptom, assessed	The patient's reported perception of departure from normal functioning is evaluated. A time/date stamp is required.		No changes
symptom	symptom, inactive		An inactive symptom is a symptom that has been present in the past and is currently not under active treatment or causing clinical manifestations, but may require treatment or	Added data type to be consistent with



Column 1. STANDARD CATEGORY: component of the QDS standard element that classifies the type of code set	Column 2. QUALITY DATA TYPE: describes how a given standard element is used	Column 3. QDS MODEL VERSION 2 DEFINITION: based on QDS Version 2, which was derived from the HITSP Quality Interoperability Specification (c154 Data Dictionary) and the model developed by the NQF-convened Health Information Technology Expert Panel	Column 4. QDS MODEL VERSION 2.1 DEFINITION: based on feedback received during the QDS Model Version 2 Comment Period in July, 2010 <sup>1</sup>	Column 5. RATIONALE/ COMMENT: indicates change (or no change) in the definition and provides explanation for the revisions
			monitoring in the future. A time/date stamp is required.	similar categories.
symptom	symptom, resolved		An active symptom is a symptom that has been present in the past and is currently not expected to recur. A time/date stamp is required.	Added data type to be consistent with similar categories.
system characteristic		The structural configuration of an organization, e.g., nursing staff ratios, availability of durable medical equipment, health information technology structures (e.g., e-prescribing), and invasive procedure capabilities.	The structural configuration of an organization, e.g., nursing staff ratios, availability of durable medical equipment, health information technology structures (e.g., e-prescribing), access to care systems, or invasive procedure capabilities.	Modified category definition; added the phrase 'access to care systems.'
system characteristic	system characteristic	The structural configuration of an organization, for example nursing staff ratios, availability of durable medical equipment, health information technology structures (e.g., e-prescribing and invasive procedure capabilities). A time/date stamp is required.	The structural configuration of an organization, for example nursing staff ratios, availability of durable medical equipment, health information technology structures (e.g., e-prescribing), access to care systems, or invasive procedure capabilities. A time/date stamp is required.	Modified data type definition; added the phrase 'access to care systems.'
transfer of care		Transfer of care refers to the different locations or settings a patient is released to, or received from, in order to ensure the coordination and continuity of healthcare. Such transfers involve a handoff process, whereby there is an exchange of patient information as well as a transfer of accountability and responsibility for patient care.	Transfer of care refers to the different locations or settings a patient is released to, or received from, in order to ensure the coordination and continuity of healthcare. Such transfers involve a handoff process, whereby there is an exchange of patient information, permanent or temporary medical devices or equipment, as well as a transfer of accountability and responsibility for patient care.** <sup>xii</sup>	Modified category definition; added the phrase 'permanent or temporary medical devices or equipment.'
transfer of care	transfer from	The setting from which a patient is received (e.g., home, acute care hospital, skilled nursing) to the current location, A time/date stamp is required.		No changes
transfer of care	transfer to	The setting from which a patient is released (e.g., home, acute care hospital, skilled nursing) to the current location. A time/date stamp is required.		No changes
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**Quality Data Set Model Standard Categories and Quality Data Types:** 

Standard Category	Quality Data type
are experience	patient care experience
	provider care experience
are plan	care plan
ommunication	communication: provider to provider
	communication: from patient to provider
	communication: from provider to patient
ndition/ diagnosis/ problem	diagnosis, active
	diagnosis, family history
	diagnosis, inactive
	diagnosis, resolved
evice	device, adverse event
	device, allergy
	device, applied
	device, intolerance
	device, order
agnostic study	diagnostic study, adverse event
	diagnostic study, intolerance
	diagnostic study, order
	diagnostic study, performed
	diagnostic study, result
counter	encounter, ordered
	encounter, performed
nctional status	functional status, ordered
For cross reference, see 'risk ategory/assessment,'	functional status, performed
hysical exam' and 'individual haracteristic']	functional status, result
dividual characteristic	patient characteristic
	provider characteristic

intervention	intervention adverse event
For cross reference, see	intervention, adverse event
[Procedure]	intervention, intolerance
	intervention, order
	intervention, performed
	intervention, result
laboratory test	laboratory test, adverse event
	laboratory test, intolerance
	laboratory test, order
	laboratory test, performed
	laboratory test, result
medication	medication, active
	medication, administered
	medication, adverse effects
	medication, allergy
	medication, dispensed
	medication, intolerance
	medication, order
negation rationale	communication, not done
	device, not done
	diagnostic study, not done
	encounter, not done
	functional status, not done
	laboratory test, not done
	medication, not done
	physical exam, not done
	procedure, not done
	substance, not done
physical exam	physical exam, finding
For cross reference, see	physical exam, ordered
'functional assessment,' 'risk	
Tunulunai assessment, TISK	physical exam, performed

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category/assessment' and 'individual characteristic']	
preference	patient preference
	provider preference
procedure	procedure, adverse event
[For cross reference, see	procedure, intolerance
'intervention']	procedure, order
	procedure, performed
	procedure, result
risk category/assessment [For cross reference, see 'functional assessment,' 'physical exam' and 'individual characteristic']	risk category/assessment

substance, administered
substance, adverse event
substance, allergy
substance, intolerance
substance, ordered
symptom, active
symptom, assessed
symptom, inactive
symptom, resolved
system characteristic
transfer from
transfer to

#### Care experience definition references:

- a. Patient experience is a synchronicity of people, processes, interactions, and communication designed around a common vision that is clearly communicated throughout the organization and accessible to staff in any role. This includes the perception of the organization (the brand promise), the first interaction, the environment, all aspects of any visit, the ongoing relationship, inspiration, the roles and behaviors of the staff, as well as other issues. (Adapted from: HealthLeaders Media. *MarketShare guest post: the difference between patient-centered care and patient experience,* April 27, 2009. Available at: http://blogs.healthleadersmedia.com/marketshare/2009/04/patient-centered-care-and-patient-experience/. Accessed 17 May 2010.
- b. Merriam-Webster Online Dictionary. Experience definition, available at: http://www.merriam-webster.com/dictionary/experience, accessed 17 May 2010.
  - 1. a. direct observation of or participation in events as a basis of knowledge b : the fact or state of having been affected by or gained knowledge through direct observation or participation
  - 2. a: practical knowledge, skill, or practice derived from direct observation of or participation in events or in a particular activity b : the length of such participation <has 10 years' experience in the job>
  - 3. a: the conscious events that make up an individual life b: the events that make up the conscious past of a community or nation or humankind generally
  - 4. something personally encountered, undergone, or lived through
  - 5. the act or process of directly perceiving events or reality
- c. The Institute for Healthcare Improvement, with the support of the Rx Foundation and The Robert Wood Johnson Foundation, is working to identify best practices and promising system changes that enable patient-centered care in three areas:\*
- d. The Institute for Healthcare Improvement, with the support of the Rx Foundation and The Robert Wood Johnson Foundation, is working to identify best practices and promising system changes that enable patient-centered care in three areas (Institute for Healthcare Improvement. *Patient- Centered Care: General,* available at: http://www.ihi.org/IHI/Topics/PatientCenteredCare/PatientCenteredCareGeneral/, Accessed 17 May 2010.):\*
  - Involving patients and families in the design of care
  - Reliably meeting patient's needs and preferences
  - Informed shared decision making

<sup>ii</sup> Consumer Assessment of Healthcare Providers and Systems (CAHPS). Rockville, MD:Agency for Healthcare Research and Quality (AHRQ) - Available at www.cahps.ahrq.gov/default.asp. Last accessed May 2010.

<sup>iv</sup> International Organization for Standardization (ISO), *Health Informatics – Requirements for an Electronic Health Record Architecture ISO/TS 18308.* Geneva, Switzerland:ISO, 2004. Available at www.iso.org/iso/home.htm. Last accessed May 2010. (Note – no changes in the QDS Model Version 2 and 2.1 citations took place)

<sup>v</sup> National Palliative Care Research Center (NPCRC). New York, NY:NPCRC, 2010. Available at www.npcrc.org/. Last accessed May 2010.

<sup>vi</sup> National Cancer Institute (NCI). Bethesda, MD:NCI, 2010. Available at www.cancer.gov/. Last accessed May 2010. (Note – no changes in the QDS Model Version 2 and 2.1 citations took place)

<sup>vii</sup> Brown F, Leon-Chisen N. *ICD-9-CM Coding Handbook 2009*. Chicago, IL: American Hospital Association, 2009. Available at www.ahacentraloffice.org/ahacentraloffice/html/icd9cm.html. Last accessed May 2010.

 <sup>viii</sup> (i) Patrick DL, Erickson P. Health Status and Health Policy: Quality of Life in Health Care Evaluation and Resource Allocation. NewYork: Oxford University Press; 1993.
(ii) Horsman J, Furlong W, Feeny D, et al. The health utilities index (HUI): concepts, measurement properties and applications, Health and Quality of Life Outcomes. 2003;1-54. Abstract available at: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC293474/

<sup>ix</sup> Modified from Canada Health Infoway

\* AHRQ. Pneumonia Severity Index Calculator (PSI). Bethesda, MD: AHRQ. Available at: http://pda.ahrq.gov/clinic/psi/psicalc.asp. Last accessed May 2010.

<sup>xi</sup> European Chemicals Agency. *REACH-Registration, Evaluation, and Authorisation of Chemicals.* France. 2005 Available at www.prc.cnrs-gif.fr/reach/en/home.html. Last accessed May 2010.

<sup>xii</sup> \*(i) Coleman E. Falling through the cracks: challenges and opportunities for improving transitional care for persons with continuous complex care needs. *J Am Geriatr* Soc,2003;51(4):549-555. \*\*(ii); Alem L Joseph M, Kethers S et al. ,Information environments for supporting consistent registrar medical Handover, *Health Inform Manage J*, 2008;37(1): 9-23; Anderson C D, Mangino RR, Nurse shift report: who says you can't talk in front of the patient?, *Nurs Ad Q*, 2006;30(2):112-122; Benson E.Rippin-Sisler C, Jabusch Ket al. Improving nursing shift-to-shift report, *J Nurs Care Qual*, 2006; 22(1):80-84; Caruso EM, The evolution of nurse-to-nurse bedside report on a medical-surgical cardiology unit, *Medsurg Nurs*, 2007;16(1):17-22.; Kerr MP, A qualitative study of shift handover practice and function from a socio-technical perspective, *JAdv Nurs*, 2002; 37(2):125-134; Lardner R, *Effective Shift Handover - A Literature Review*, Health and Safety Executive Report, Edinburgh, UK: Keil Centre;1996, p. 17 Available at: http://www.npsf.org/download/Focus2004Vol7No2.pdf. Lasy accessed May 2010; Manning ML, Improving clinical communication through structured conversation, *Nurs Econ*, 2006; 24(5): 268-271; Riesenberg LA, Leitzsch J, Little BW, Systematic review of handoff mnemonics literature, *Am J Med Qual*, 2006; 24(3):196-204; Strople, B, Ottani, P, Can technology improve intershift report? What the research reveals, J Prof Nurs , 2006;22(3):197-204. (Note – no changes in the QDS Model Version 2 and 2.1 citations took place)

<sup>(</sup>i) Canada Health Infoway EHR Glossary; (ii) Wikipedia, available at: http://en.wikipedia.org/wiki/Diagnostic\_test; Note – no changes in the QDS Model Version 2 and 2.1 citations took place