



Final Document

Recommendations of the UTI Workgroup

Background

The 30% reduction in complications required under the new hospital waiver and the annual targets outlined within the Maryland Hospital Acquired Condition (MHAC) payment policy¹ are based on 65 Potentially Preventable Complications (PPCs).² Because PPCs are based on administrative data, the assignment of a PPC is derived from clinical documentation and coding. While hospitals have dedicated significant resources to improving clinical documentation and coding, it has become apparent that variability in the criteria used to define the occurrence of specific clinical conditions across hospitals is hindering our ability to accurately quantify complications and collaborate to prevent them. The premise of this work is that use of consistent criteria to define specific conditions will provide the necessary 'level setting' from which to truly measure performance and support collaboration on quality improvement opportunities. For these reasons, hospital leaders requested that MHA convene a group of clinical and quality representatives to consider criteria currently used across hospitals, review evidence, relevant literature and guidelines, and work to develop consensus definitions.³

Process

Informed by data analyses of PPC performance, hospital medical and quality leaders identified a subset of diagnoses that were widely agreed upon as having varied diagnostic and documentation patterns. The diagnoses were then prioritized based on volume and variability in performance and grouped into four categories: urinary tract infections, obstetric hemorrhages and lacerations, pneumonia/respiratory failure and acute renal failure/kidney injury. A workgroup was convened around each of the four

¹ The statewide reduction target for 2015 is 7% comparing FY2014 to CY2015 risk adjusted PPC rates; The amount at risk for the MHAC program is 3% of inpatient revenue

² 3M Health Information Systems developed PPCs; The PPC software relies on present on admission indicators from administrative data to calculate the actual versus expected number of complications for each hospital

³ This activity was approved by MHA's Council on Clinical Quality Issues as well as the Executive Committee

categories and was comprised of physicians, non-physician clinicians, infection preventionists and documentation and coding professionals from a cross-section of Maryland's community and teaching hospitals and health systems.⁴ Over a series of meetings each workgroup was charged with developing a proposed definition informed by published criteria and existing practice. Hospitals were engaged in the process through submission of hospital-based definitions as well as offering comment on the workgroups' proposed definitions. The workgroups' recommendations account for inpatient coding guidelines⁵ and apply to any occurrence of the diagnosis, not only scenarios that would trigger a PPC under the MHAC policy.

Each workgroup's proposed criterion are intended to serve as a guideline for provider and coder consideration and are not intended to restrict provider judgment when diagnosing a patient or alter coder assignment based on established guidelines. This clinical definition will not supplant the need for providers to clearly document a diagnosis. Provider documentation will continue to be the basis for inpatient coding of diagnoses as is required by coding guidelines. Coders will continue to use provider documentation as the source of the coded diagnosis. The workgroup encourages hospitals to utilize approved definitions to guide coders and clinical documentation specialists to query physicians when the documented diagnoses lack the respective supporting clinical indicators.

Urinary Tract Infection (UTI) Work Group Deliberations

The workgroup, over a series of meetings, based their deliberations on the following:

- *Current practice at Maryland hospitals*
 - Medical and Quality leads at all Maryland acute care hospitals were asked to submit the policies used at their facilities to define UTIs
- *Relevant literature and published guidelines by academic bodies or government agencies including, but not limited to the Centers For Disease Control and*

⁴ Workgroup meeting material and rosters available at <http://www.mhaonline.org/quality/complications-work-groups>

⁵ ICD-9 Official Coding Guidelines, approved by four organization that make up the Cooperating Parties for the ICD-9-CM: the American Hospital Association (AHA), the American Health Information Management Association (AHIMA), the Centers for Medicare and Medicaid Services (CMS) and the National Center for Health Statistics

Prevention's National Healthcare Safety Network (CDC/NHSN) as well as the Infectious Disease Society of America (IDSA)

- *Expertise of workgroup members*

Group members were challenged to craft defining criteria for UTI. The workgroup first attempted to manage this complexity by creating a scoring tool⁶ whereby points are assigned for signs, symptoms and test results. Under the tool, point totals over a given threshold are indicative of an UTI. Work group members from the various health systems in attendance informally validated this scoring tool in patients that were coded as having had an UTI. They found that, according to this proposed scoring tool, there was an over-diagnosis of UTIs with many patients who did not meet the criteria being treated. This scoring tool was disseminated to the wider hospital field for comment on February 5th.

Though some feedback received was positive, many comments were critical of the tool. Some commenters reported that the scoring tool would still be too inclusive while others felt the scoring tool would underdiagnose UTI. Some pointed out a lack of study and validation to endorse its use; others noted that the list of excluded patients was too expansive. Many encouraged the workgroup to simply endorse the CDC/NHSN criteria.

The workgroup considered the feedback from every commenter and revisited its scoring tool. One challenge identified was the compression of the numerous combinations of test results and presenting signs and symptoms considered by providers into a usable and straightforward definition that would accurately capture the presence of an UTI for a significant proportion of hospital patients that have an UTI. This difficulty stems from a void in the literature of the required elements of a definition that are appropriate for all, or even most, situations. For instance, the complexity of the patient populations being served in hospitals means that the relevance of signs and symptoms will vary greatly. For patients with an indwelling catheter, the signs and symptoms of dysuria, frequency and urgency are likely immaterial and cannot be a required component of an UTI definition. The workgroup had considered making a Urine Culture (UC) a required element, however not all positive urine cultures are indicative of a urinary tract infection.

⁶ The original scoring tool is available at <http://www.mhaonline.org/File%20Library/Quality/Complications%20Workgroups/UTI-Draft-Definition-For-Hospital-Comment.pdf>

The workgroup acknowledged that many patients, particularly outpatients and patients with short inpatient or observation stays, are in the hospital for too short a length of time to have the benefit of a diagnosis informed by an UC. The workgroup hesitated to endorse a definition that made an UC a necessary component, as this might incentivize inappropriate ordering and delayed care.

Ultimately workgroup members felt that they were unable to accommodate commenters' concerns and create a practical instrument. While the workgroup was not able to reach consensus on an alternative, they refrained from endorsing the CDC/NHSN criteria. Workgroup members expressed concern that the CDC/NHSN criteria were intended for epidemiological use and, if used for diagnostic purposes, could lead to inappropriately diagnosed conditions or missed diagnoses of the appropriate condition.

The workgroup agreed that a more useful application of its efforts would be to encourage the accurate capture of UTI diagnoses in coding. In general, the workgroup agreed that a diagnosis of a UTI should not be based solely on laboratory data (i.e. positive UA and/or UC) nor should it be based solely on clinical findings. If a diagnosis was made based on one of these factors only, then this would be reason for the clinical documentation specialist to query the provider to clarify their diagnosis. The workgroup also noted an additional challenge – given the complexity of patients being served, as well as the length of turnaround time on UCs, providers may initiate treatment of a suspected UTI before having the benefit of a more complete clinical picture. During this process, providers may note a 'suspected UTI' or a 'possible UTI' in their clinical documentation. Documentation specialists and coders highlighted the fact that providers sometimes subsequently fail to close the documentation loop and make a follow-up note either confirming or dismissing the UTI with a fuller explanation detailing the clinical evidence that was considered. Members also wish to emphasize that 'suspected' or 'possible' UTIs are captured as UTIs in patients' records.

For these reasons, the workgroup would encourage hospitals to utilize approved internal definitions to guide coders and clinical documentation specialists to query physicians when the documented diagnoses lack appropriate clinical indicators.