

University of Nevada, Reno

Children's Process of Care Measure Implementation Readiness

A thesis submitted in partial fulfillment of the requirements for the degree of

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by

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Abstract

National adult acute care outcome tracking was instituted in 2000 under the assumption that doing so, and publicly reporting the results, would lead to improvements in the healthcare industry and lives saved. The results speak for themselves.

Unfortunately, the process has yet to be mandated in the care of our nation's most valuable assets: our children. However, that is about to change. This research project explored Children's Process of Care Measure implementation preparedness.

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Introduction

In 1998 The Joint Commission (TJC) trademarked the name ORYX® for their soon-to-come quality reporting system. An Oryx is a type of quick-footed animal, much like a gazelle, found in Africa, hence the term was intended to make people think (what is it?) and to demonstrate an ability to respond quickly to changes in the environment (run). Then, in 2001, TJC launched bundled care protocols, originally named Core Measures, as a mechanism for improving outcomes in acute care facilities ("Core Measure Sets," 2015, para. 1). Over the years, facilities made great strides in compliance with the bundles and better patient outcomes followed. Facilities are now reporting 100% compliance for several Core Measures over numerous years, which in 2014 led to those measures being “retired” ("Core Measure Changes," 2015, para. 1). Retired does not mean the bundles are discarded. Rather, it means 100% compliance is the expectation, hence the focus on further improvement may move to other areas of opportunity.

Other terms, such as “Process of Care Measures”, are now being used to more accurately reflect that what is being scrutinized is a complete process of patient care as a whole rather than bundles of singular data points. An article in the New England Journal of Medicine calls Core Measures “Accountability Measures” and describes such processes as having four components: derives from “a strong research base”, uses a measurement tool which assesses whether evidence based care was delivered, addresses a “process proximal to the outcome”, and has “minimal or no adverse consequences” (Chassin, Loeb, Stephan, & Robert, 2010, p. 864-687). However, since the initial

implementation in 2000, only one item, Children's Asthma Care (CAC) has applied to the children of the United States.

Children represent a high risk patient population. Add to that, children typically represent less than 10% of a given total patient population in a region, and subsequently there is not only high risk, but also low volume, further exacerbating the level of risk. It is puzzling that, to date, the Joint Commission has not sought more Process of Care Measures relative to children's services. One hypothesis is, politically, children lack power, and initiatives are driven by dollars spent, with senior citizens having both a prominent voice and representing the greatest healthcare costs as a patient population (Dowell & Turner, 2014). However, with the advent of the Affordable Care Act, more tax dollars are being spent on children's care, prompting a shift in priorities.

Through its on-line Pediatric Quality Measurement System (PQMS), the Children's Hospital Association (CHA) already reports several Non-Core Measures to the JC ORYX® initiative which focus on readmission rates for:

- Low and acuity respiratory disorders
- Low acuity neonates
- Seizures
- Sickle-cell Anemia crisis
- Low acuity Asthma
- Low acuity Bronchiolitis
- Length of Stay (LOS) for low and high acuity Asthma and low acuity Bronchiolitis.

The Children's Hospital Association has also recognized the need to develop metrics in alignment with the most recent Institute for Healthcare Improvement initiative, the Triple Aim. The Triple Aim focuses on three key areas: population health, experience of care, and per capita cost (The IHI Triple Aim, 2015). The Children's Hospital Association proposes these items be evaluated and reported:

- Central Line Associated Blood Stream Infection (CLABSI)
- Catheter Associated Urinary Tract Infection (CAUTI)
- Surgical Site Infection (SSI)
- Appropriate use of Antibiotics for Otitis Media and Urinary Tract Infection (UTI) in ambulatory care
- Asthma, Gastroenteritis (GE), UTI and short term complications of Diabetes admission rates
- Inpatient immunization rates for Influenza and Pneumococcal 23 vaccines
- Neonatal Hepatitis B immunization rates
- Screening for maternal depression as well as referrals for such
- Domestic violence reporting
- Neonatal Intensive Care Unit (NICU) and Pediatric Asthma Length of Stay (LOS)

Acute Care Facilities, even those with a free-standing or hospital-within-a-hospital Children's Hospital design, have not been mandated to track and report these measures to date, yet clearly that time is coming. Therefore, the purpose of this research is to discover the current state of perceived preparedness to implement, track, and report Children's Process of Care Measures across the United States Children's acute care facilities.

Literature Review

The first item searched during the literature review was for any existing “validated tool to rank preparedness.” Using Medline, CINAHL, and Google Scholar, all of the thousands of results from 2011 to 2015 dealt with biological events and other forms of disaster preparedness except one article, which was part of a doctoral thesis on preparedness of school counselors to implement wellness strategies (Burnet, 2001). However, even that dissertation noted a lack of validated tools on the matter, so the author created her own tool. The next keyword search was “validating perception.” Here, the literature focused on a variety of items such as perceptions on high reliability organizations (Barrett, Novak, Vanette, & Shumate, 2006), and educational content (Henderson, Cooke, Creedy, & Walker, 2012) where the authors stated they failed to locate a validated tool and, thus, created their own. Other research seeking to validate perception dealt with nurses and use of technology, wherein the tool used was focused on before and after likeability/usability (Tremblay, 2010). Further keyword searches for “organizational readiness,” “readiness for change,” and “organizational preparedness” also failed to produce relevant results. In short, there is a paucity of literature on the topic of perceived preparedness to implement new regulations, in this instance, process of care measures for children in the acute care setting.

Methodology

According to the CHA database, there are a total of 207 Children's hospitals across the United States. A few are outpatient clinics, and, therefore, not the focus of this research. Another 20 were less than 50 beds, hence, their patient volume was presumed to be too small to be impactful for this study. The remaining 183 were included. An introductory letter explaining the intent of the research and invitation to participate was sent to the Children's Hospitals' Chief Nursing Officers (CNO) that included a link to the on-line survey and an option to request a live link be sent to the CNO via email if preferred. (Appendix 1). At three and six weeks after the original invitation to participate, survey reminder letters were sent (Appendix 2). The actual survey itself was conducted via Survey Monkey and can be viewed in Appendix 3. The goal was to achieve a survey response from 18 facilities, or 10 %.

Don Dillman is well known for his years of research into how to optimize survey responses. In the latest edition of his book, Internet, phone, mail, and mixed-mode surveys: the tailored design method (2014), he details how to achieve the highest yield by:

- asking the most critical questions first
- using adult-to-adult communication style
- using more than one mode of survey
- sending reminder notices
- utilizing the concept of social exchange

Social exchange implies the reward for completing the survey exceeds the cost of responding (in terms of personal time, etc). Within this concept, a meta-analysis by Church determined token cash incentives provided in advance produce the most effect on response rates as compared to gifts or cash payments received after responding (Dillman, 2014). Therefore, included in the initial survey letter was two dollars and a directive to “enjoy a cup of coffee on us.”

Data Analysis/Results

Data were analyzed using descriptive statistics. The target response rate was 10%, or 18 surveys. The final total was 32, or 17.4 %. The first wave of letters garnered 21 responses, wave 2 yielded another eight, and the final round added another three responses. Seventy one percent (N=22) of the respondents were unaware of any impending Children’s Process of Care Measures.

Of the nine respondents who were aware of impending Children’s Process of Care Measures, what they thought those measures might be varied (Table 1). Effective in 2016, portions of the Children’s Asthma Care measure were retired, leaving only the home teaching component, so this is technically not a new measure. One respondent listed perinatal measures, however, these are separate and distinct from the list of

Table 1: If your answer to Question #1 is “yes,” what are those measures?

Respondent 1	Appropriate use of CT scanning in pediatrics
Respondent 2	CAUTI
Respondent 2	Perinatal care
Respondent 4	The perinatal set
Respondent 5	We know that asthma and URI such as bronchiolitis are identified areas
Respondent 6	Thinking sepsis and antibiotic stewardship
Respondent 7	Exclusive breast feeding, asthma care
Respondent 8	Most recent - perinatal on breast care and feeding
Respondent 9	Asthma care and breast feeding

potential Children's Measures. This leaves us with potentials to track and report: Catheter Associated Urinary Tract Infections (CAUTI), appropriate use of Cat scans, Upper Respiratory Infections (URI), bronchiolitis, sepsis, and antibiotic stewardship.

The responses to question three, "For any additional measures identified in Question #2, which, if any, have you already implemented?" were:

- We used to do the core asthma measures but those are no longer required by TJC. However, Magnet requires a core measure so we are not clear what we will do next re-designation
- None – 5 responses
- We have had an asthma management program and worked in our state on protocols for inpatient care and transitions to home (Texas). Has lost some steam since JC dropped this as a pediatric core measure. Texas children's hospitals starting a bronchiolitis work group to look at management strategies.
- We still submit data for the "asthma care plan compliance" even though this measure is phased out.
- Increase lactation education and lactation consultants in hospital
- Breastfeeding exclusivity
- Both (Breastfeeding exclusivity, asthma care)

For question 4, "If you have not implemented any measure identified in Question #2, do you have plans to do so?" 62.5% (N=32) responded in the affirmative.

Question 5, "If you have plans to implement any measures identified in Question #2, where in the planning stage are you?" garnered the following answers:

- Review literature, meet with Radiology, and make recommendations via our children's hospital Performance Improvement
 - Asthma implemented but we are not going to audit as robustly any longer.
Will continue to evaluate care processes on inpatient. Bronchiolitis just starting
 - Talking and sharing
 - No plans because no new pediatric measures have been released. Of course we will make a plan when we know the measure.

Discussion

Most respondents basically indicated their facility uses a “wait and see” approach, i.e., why work on developing a care bundle that might not become process of care measure requirement from TJC? However, during the interim since this project began, more information has been coming through on the CHA network site. It is now expected TJC will be creating several children’s process of care measures effective January 2017, making this research all the more timely. While what those measures are remains speculative as of summer 2016, we know we can loosely group potentials into three categories based on existing adult measures: bundled cares that seek to reduce length of stay, that reduce readmissions for chronic diseases/disorders, and that reduce Hospital Acquired Infections. Based on goals from healthcare watchdog organizations and the Affordable Care Act, we know, coming too, will be measures designed to improve the health of community residents. For children (as well as across the lifecycle) this means measures impacting immunity, nutrition, and obesity. The list of potential measures exists on the CHA website, so it is puzzling CHA member facilities are hesitant to work towards these improvements prior to a government mandate to do so.

Limitations

The initial assumption that every CHA member facility would employ a CNO proved false as evidenced by the variety of titles provided by the respondents (see Table 2).

Table 2: Question 6 “What is your role or position in your healthcare organization?”

Title	Number of respondents with this title
Associate CNO	1
Clinical Director Pediatrics and PICU	1
CNE	2
CNO	10
Director of Nursing	5
Director of Patient Care Services	1
Executive Director	1
System CNO	1
VP of Nursing	2
VP/CNO	1

Lacking exact names of facility CNOs to send the survey letter presented the risk many would simply end up in the trash/junk mail bin. In fact, 6 were returned for what was written on the envelope as “incomplete or invalid addresses.” Finally, the majority of today’s workers are used to, and appreciate the ease of, responding to email. Hence, having exact names and titles of high-level facility executives and their email addresses to present the survey completely electronically could have improved the number of responses. The survey did not ask the bed capacity of the responding facility, hence many or all responses could have come from smaller facilities which have not allotted resources to watching trends in healthcare regulations.

Conclusion:

This research reveals an area of opportunity for healthcare organizations to effectively prepare for change. While it is understandable with healthcare dollars tight, facilities would prefer to spend moneys on definite regulatory compliance requirements rather than potential regulations, it is also true improving outcomes decreases cost, hence, moneys spent on any measure adds rather than subtracts from the proverbial bottom line. Today's technologies are increasingly assisting in this endeavor. Further research into the use of predictive modeling using multi-variant statistical software to determine the effect of multiple treatments in any bundled care rather than the tediousness of looking at individual items singly is needed.

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Appendix 1: Introductory Letter and Invitation to Participate in the Research



How prepared is YOUR facility to implement Children's Process of Care Measures?

My name is Elizabeth Cogan and I am a master's student at the University of Nevada at Reno (UNR) in the Clinical Nurse Leader track. I am conducting my thesis study, under the supervision of my advisor Dr. Patsy Ruchala, on the perceived preparedness of Children's Hospitals to Implement Children's Process of Care (Core) Measures. I am inviting the Chief Nursing Officers from all large CHA member facilities to participate in a brief survey. Your responses are very important and will be helpful in assessing the current state of readiness to meet upcoming Children's Process of Care Measures from The Joint Commission. This study was approved by the UNR Institutional Review Board on March 2, 2016.

This short survey should take no more than 5 minutes to complete. Please enjoy a cup of coffee on us while you participate. The survey can be accessed via the following link: <https://www.surveymonkey.com/r/Childrensprocessofcare>. If it is more convenient for you, I am happy to send a live link to your email so you can click and go. To receive a live survey link via email, simply email me at: escrn7339@yahoo.com and a link will be sent within 24 hours.

Your participation is entirely voluntary. All information will be kept confidential to the extent allowed by law and University policy. No personally identifiable information will be associated with your responses. You will have the opportunity to request the survey results. Should you have any further questions or comments, please feel free to contact me by email at escrn7339@yahoo.com, or by phone at 775- 982-5444. You may also contact my advisor at:

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Thank you for your time and consideration.

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Appendix 2: Survey Reminder Letter



How prepared is YOUR facility to implement Children's Process of Care Measures?

A few weeks ago, I invited you and your facility to participate in some very important nursing research regarding the perceived preparedness of Children's Hospitals to Implement Children's Process of Care (Core) Measures. If you have already responded, thank you so much! If you requested to view the results, those should be available in October of 2016.

If you have not yet participated, this short survey should take no more than 5 minutes to complete. The survey can be accessed via the following link:
<https://www.surveymonkey.com/r/Childrensprocessofcare>. If it is more convenient for you, I am happy to send a live link to your email so you can click and go. To receive a live survey link via email, simply email me at: escrn7339@yahoo.com and a link will be sent within 24 hours.

Your participation is entirely voluntary. All information will be kept confidential to the extent allowed by law and University policy. No personally identifiable information will be associated with your responses. You will have the opportunity to request the survey results. Should you have any further questions or comments, please feel free to contact me by email at escrn7339@yahoo.com, or by phone at 775- 982-5444. You may also contact my advisor at:

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Thank you for your time and consideration.

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Appendix 3

Children's Process of Care (Core) Measure Preparedness Survey
2015

1. Are you/ your organization aware of any coming additions to the Joint Commission Core Measures that relate to Children's services?
 - a. Yes
 - b. No
2. If your answer to Question #1 is "yes," what are those measures?

3. For any additional measures identified in Question #2, which, if any, have you already implemented?

4. If you have not implemented any measure identified in Question #2, do you have plans to do so?
 - a. Yes
 - b. No
5. If you have plans to implement any measures identified in Question #2, where in the planning stage are you?

6. What is your role or position in your healthcare organization?
7. Would you like a copy of the results of this survey?
 - a. Yes
 - b. No
8. If you answered yes to #7, please provide an email or physical address:
