

Verbal Order Policies, Occurrence, and Perceptions

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Structured Abstract (250 words)

Purpose: To evaluate systematically the use of verbal and telephone orders (VOs) through focused surveys of community hospitals and academic medical centers.

Scope: 1) Develop descriptive profiles and a typology of acute care hospitals' inpatient VO policies, strategies, tactics, and specific organizational structures and processes used to govern their use of and to minimize potential errors and adverse events; 2) develop estimates of inpatient VO frequency and occurrence; and 3) gain insight into the perceived advantages / disadvantages associated with the use of VOs and the extent to which VO policies are followed and effective in preventing miscommunications and misunderstandings that lead to patient care errors.

Methods: A mixed-methods approach using document reviews and surveys was used to analyze VO policies in samples of acute care community hospitals in Iowa and Missouri and in a national sample of academic health centers. Final study sample include 13 Critical Access/Rural, seven Rural Referral, nine Urban, and 11 Academic Medical Centers. Analysis of hospital VO policies was limited to policies related to those authorized to give VOs and Nursing- and Pharmacy-related VO policies.

Results: Analysis of the VO policy documents revealed a range of different types of health professionals authorized to give VOs and a much wider range of health professionals authorized to receive a VO. Nearly all VO policies indicated requirements for documenting who gave, who received, and time and date of VO. Though almost 100% of the policies identified specific time frames in which the VO must be countersigned, many hospitals had different time frames listed in their VO-related policy documents. Few VO policies excluded specific types of VOs, such as for chemotherapy. The surveys found that almost none of the study hospitals reported conducting any systematic monitoring of VOs, with the exception of tracking VOs that had not been countersigned within the approved time frame.

Key words: verbal orders, communication, acute care hospitals

Purpose

Face-to-face verbal and telephone orders (VOs) are commonly used in inpatient care settings. VOs hold substantial potential for miscommunication due to a variety of factors, including fatigue, workload, sound-alike medications, background noise, accents, dialects, and different pronunciations. VO prescribers and receivers may also mis-speak, miscommunicate, or not understand patient-specific information being exchanged (e.g., indicating the possible need for an order). These inherent dangers have been recognized by The Joint Commission (TJC), the National Quality Forum (NQF), and others. Though VOs are commonly used, there has been little systematic study of the strategies and tactics used to ensure their appropriate use or ways to ensure that they are accurately communicated; correctly understood, initially documented, and subsequently transcribed into the medical record; or ultimately carried out as intended.

The research proposed in this study was designed to make a significant contribution to understanding VOs by addressing several gaps in the existing literature.

- Specific Aim 1: Analyze and describe the actual content of acute care hospitals' inpatient VO policies in order to understand better how these policies serve to govern the use of, and specify the indications for, using or not using VOs.
- Specific Aim 2: Advance our understanding of the variation in the use of VOs by different categories of hospitals and in different types of care settings within these institutions by developing VO use estimates.
- Specific Aim 3: Provides important exploratory work into the development of insight into the perceived effectiveness of VO policies and appropriateness of VO utilization.

Scope

VOs may represent 20% or more of all inpatient orders^{1,2,3} and are commonly used when prescribers (i.e., physician, NP, PA) are unable, or unwilling, to write in the medical record or electronically enter patients' care orders using a CPOE system. As such, VOs represent an important communication mechanism in the patient care environment, allowing for up-to-the minute communication on patients' clinical status, laboratory details, and other information essential for more timely clinical decision making and generation of patient care orders. The use of face-to-face verbal orders is clearly necessary when the prescriber is in the middle of a procedure or medical emergency and it is impractical to stop patient care to write a patient care order. Likewise, telephone VOs are necessary if the prescriber is not physically present when an order is needed (e.g., at night). Conversely, there are instances when VOs clearly should not be allowed, such as when ordering complex chemotherapy or Do Not Resuscitate (DNR) orders. In between these specific indications for when VOs should and should not be used, there can be great variation in the use of VOs during routine patient care processes, such as patient rounds, interdisciplinary team meetings, or other non-emergent / non-procedure patient care situations. Of particular concern is the extent to which face-to-face verbal orders become routine and are used as a convenience, thus replacing prescribers' writing or electronically entering of patient care orders. Hospital VO policies and procedures are used to govern the use of VOs by limiting them to appropriate situations, helping ensure that VOs are clearly communicated, understood, transcribed, and carried out as intended by the prescriber.

Due to a variety of human and environmental factors^{4,5} (e.g., fatigue, workload, sound-alike medications, background noise, accents, dialects and different pronunciations, and number of different individuals and steps involved in the verbal order process), there is significant opportunity for miscommunication, misunderstanding, and errors during the verbal order process.

The inherent danger of VOs has been recognized by The Joint Commission, the NQF, and others by their specific recommendations regarding “read-backs” and other strategies to reduce their use and to ensure that the correct communication occurs.⁶⁻⁹

The study hospitals included acute care community hospitals from Iowa and Missouri and academic medical centers (AMC) from throughout the United States. There were 150 Missouri and 117 Iowa community hospitals and 94 University Health System Consortium member AMCs from which the study samples were drawn. We assigned four AMCs (hospitals and affiliated facilities) located in Missouri (n=3) and Iowa (n=1) to the AMC group. From the remaining Missouri and Iowa hospital samples, we excluded mental health hospitals (n=15), long-term care facilities (n=8), children’s hospitals (n=4), rehabilitation centers (n=3), VA medical centers (n=6), and one cancer hospital, resulting in 110 Missouri hospitals and 116 Iowa hospitals eligible for inclusion in the study. These Missouri (n=110) and Iowa (n=116) community hospitals were then categorized into one of the following three Medicare-based categories of acute care hospital: 1) Critical Access Hospital (CAH) and Rural, 2) Rural Referral, or 3) Urban – nonacademic. CAHs are located in rural areas, have fewer than 25 beds, and provide a limited range of services. Rural hospitals are somewhat larger facilities with fewer than 100 beds and limited specialty services. CAHs and Rural hospitals were combined into a single category because of their general similarity in size and mix of patient care services. Rural Referral hospitals are larger institutions located in communities with fewer than 35,000 residents, will generally have between 100-250 acute care beds, and provide a broad range of secondary and in some cases tertiary medical and surgical services. Urban hospitals are located in communities of 50,000 or greater population and will tend to offer the broadest array of specialty medical and surgical services.

AMCs tend to be larger teaching institutions providing training to a wide range of medical and surgical specialties and tend to offer the broadest range of specialized care services; they may also serve as safety net hospitals serving the poor. A key differentiator of community hospitals and AMCs is the around-the-clock in-hospital presence of medical and surgical residents and fellows who work under the direct supervision of attending physicians. Generally speaking, community hospitals will not have physicians (except for the emergency department) routinely on site in the inpatient nursing units during the evenings, nights, weekends, or holidays. In contrast, the AMCs will have medical and surgical residents in house 24 hours a day, 7 days a week, hence the potential need for fewer telephone order communications.

Based on *a priori* power calculations, our target sample size was to have at least 10 hospitals in each of the four hospital categories included in the final data set. To account for non-response and other contingencies, we drew a stratified random sample (without replacement) of 18 CAH & Rural and 18 nonacademic Urban hospitals. We drew a sample of the 20 AMCs. This sample was stratified to reflect whether the AMCs were part of a university system or were independent hospitals collaborating with a university in training physicians. Our goal was to recruit five from each AMC category. All Rural Referral hospitals in Iowa and Missouri were included in the sample, because there were only 19 in total. Hospitals in each state had equal probabilities of being selected. For selected survey items, overall weighted confidence intervals for the reported proportions were computed for all non-AMC hospitals to determine if they were representative of hospitals in Missouri and Iowa. This approach is standard for combining data across strata in a stratified survey design such as ours. Finally, Wilson’s score method was used in conjunction with appropriate sampling weights and a finite population correction to construct valid 95% confidence intervals with PROC SURVEYFREQ in SAS 9.22.

Study hospitals' recruitment included a letter from the PI (DSW) and a Co-I (WS), accompanied by a letter of support sent to study hospitals' CEOs from either the president of the Iowa Hospital Association, the Missouri Hospital Association, or the VP and Chief Medical Officer for the University Health System Consortium. The letters explained the purpose of the study and indicated that a follow-up call would be scheduled to discuss specific questions the CEOs might have about their hospitals participating in the study. Hospital recruitment was finalized through calls made by the study staff (DSW and JB) to the CEOs. The final sample included 13 (72% response rate) Rural / Critical Access, seven (37% response rate) Rural Referral, nine (50% response rate) Urban, and 11 (55% response rate) AMCs.

Methods

Specific Aim 1: Analyze and describe the actual content of acute care hospitals' inpatient VO policies in order to understand better how these policies serve to govern the use of, and specify the indications for, using or not using VOs.

Specific Aim 1 Design, Data Collection, and Analysis. In Specific Aim 1, we conducted a qualitative analysis of hospitals' approved and formalized VO policies and procedures in order to develop descriptive profiles of participating hospitals and to develop a typology of indications for using / not using VOs and strategies, tactics, and work process characteristics and features used to help ensure that VOs are appropriately used, accurately communicated, fully understood, and appropriately documented and carried out as intended by the prescribers. After agreeing to participate, each hospital was requested to identify a primary point-of-contact for the study and was asked to send electronic copies of their verbal orders policy and procedure documents and any other documents containing information related to 1) who is allowed to give a VO (e.g., physicians, physician assistants, advanced practice nurses) and who is allowed to take a VO, specifically nursing and pharmacy services. We limited the focus to nursing- and pharmacy-related policies, because nurses and pharmacists are the most likely to receive verbal orders and because medication-related orders represented the greatest potential safety threat to patients. Each policy or procedure document was abstracted independently by two of the study's three abstractors using a standardized abstraction form. The abstraction form was developed based on policy recommendations in the literature as well as study investigators' experiences. It was then pilot tested and revised using policies from two hospitals not included in the study. The final abstracting form (Appendix A) consisted of a series of closed-ended response categories as well as room for comments. All policy documents were abstracted twice. First, one abstractor (BJW) reviewed the verbal order policy and procedure documents from all hospitals. Two other abstractors (LAD, DSW) divided the study hospitals into two groups and independently reviewed the documents for one half (for each abstractor) of the hospitals. For each hospital, the abstractors met and compared their abstraction forms. Disagreements between the abstractors, centering primarily on interpretation of specific wording used in the policies, were resolved by discussion and re-review of the areas of the documents for which there were disagreements. Once the abstraction process was completed, the data were entered using double data entry.

Specific Aim 2. Obtain estimates of inpatient verbal and telephone order frequency and occurrence based on surveying community hospitals and academic medical centers participating in Specific Aim 1.

Specific Aim 2 Design, Data Collection, and Analysis. All hospitals included in the study (n=40) were sent, electronically, a verbal order utilization survey (Appendix B). This survey asked participants to indicate if they collected data related to verbal order usage, what percent of their

orders are verbal, how the data are collected, and the respondent's perception of the level of verbal order usage (e.g., about right, too high). Thirty-one hospitals returned the surveys, for a response rate of 77.5%. Two points of contact had left their position, and new contacts were not identified. The data were entered into an Excel data file and then transferred to Statistical Package for the Social Sciences (SPSS) for analysis. Table 1 below provides detail about the number of hospitals in the study and the number that returned the survey.

Hospital Type	Number in study	Responded to survey	Response rate
AMCs	11	10	90.9%
CAH-Rural	13	10	76.9%
Rural Referral	7	5	71.4%
Urban	9	6	66.7%
TOTAL	40	31	77.5%

***Specific Aim 3:** Gain insights into key stakeholders' perceived advantages and disadvantages associated with the use of verbal and telephone orders, and explore the extent to which verbal and telephone order policies are followed, and learn how effective such policies are in preventing miscommunications and misunderstandings leading to patient care errors.*

Specific Aim 3 Design, Data Collection, and Analysis. All hospitals remaining in the sample (n=38) were sent, electronically, a verbal order perception survey (Appendix C). This survey asked participants to indicate how often they felt verbal order policies were complied with and what causes problems with verbal orders as well as to respond to questions relating to verbal order usage in the respondent's facility, perceptions of when verbal orders are most frequently used, and how their facility's implementation of CPOE (if applicable) had impacted verbal order usage. Of the 38 hospitals receiving the survey, 25 hospitals returned completed surveys, for a response rate of 65.8%. An Excel data file was created, and data were entered by study personnel (JB). The data were read into SAS 9.2 for a simple descriptive summary. One-way frequency tables were produced for each survey item, with ordinal row category sorted in ascending order of the item's Likert scale (e.g., from "never" to "always"). Table 2 below provides detail about the number of hospitals in the study and the number that returned the survey.

Hospital Type	Number in study	Responded to survey	Response rate
AMCs	10	8	80.0%
CAH-Rural	13	8	61.5%
Rural Referral	7	5	71.4%
Urban	8	4	50.0%
TOTAL	*38	25	65.8%

*Two points of contact had left their positions and new contacts were not identified. Therefore, the total number of participating hospitals went from 40 to 38.

Results

Specific Aim #1: Analyze and describe the actual content of acute care hospitals' inpatient VO policies in order to understand better how these policies serve to govern the use of, and specify the indications for, using or not using VOs.

The research team was able to meet the objectives of Specific Aim #1. This was achieved through the abstraction of each hospital's policies and the creation of descriptive profiles of each hospital's verbal order policies. A variety of different types of hospital documents was submitted for review by participating hospitals. The most common types included medical staff rules and regulations, nursing policies, and general hospital policies. Depending on the institution, the hospital policies could refer to medical staff and others approved to give verbal orders as well as nursing and pharmacy staff eligible to receive the verbal order. Nearly all hospitals sent three or more different source documents for review.

The research team's principal findings for this portion of the research were:

- A number of different individuals are authorized to give verbal orders. As expected, physicians were the most frequently identified healthcare provider authorized to give verbal orders, regardless of hospital category. Physician Assistants (PA) and Nurse Practitioners (NP) represented the next most common types, followed by podiatrists.
- In several hospitals throughout all categories, the undifferentiated group, "Licensed Independent Practitioners," was also authorized to give verbal orders. Though this would clearly include physicians, PAs, and NPs, what is not clear is whether there are other licensed independent practitioners who might be authorized to give verbal orders.
- Two categories of individuals authorized to give verbal orders that did not include a specified type of healthcare provider were "Licensed Prescriber or Authorized Agent" and "Office Designee." None of these policies clarified who would qualify as an "Authorized Agent" or "Office Designee" but instead appeared to leave this up to the Licensed Prescriber or the individual physician selecting surrogates eligible to give verbal orders on his / her behalf.
- Twenty-seven different job titles authorized to take a verbal order were identified. Overall, policy documents authorized "registered nurses" (RN), "licensed practical nurses" (LPN), and pharmacists to take verbal orders in over 75% of study hospitals.
- With few exceptions, the hospital policies did not include a definition of what constitutes a verbal order.
- Required documentation elements related to verbal orders were highly consistent in terms of documenting the following in addition to the order details: who gave and who received the verbal order, the date and time the verbal order was given, and that the order needed to be co-signed by the individual giving the verbal order. Less consistent was the requirement that orders be documented as being given verbally in a face-to-face situation versus those given over the telephone.
- A review of the study hospitals' policies revealed marked inconsistencies in the time frames in which verbal orders needed to be co-signed. These time frame descriptions included both numerical and word descriptions. In several instances, different policy documents from the same hospital contained different times for required co-signing.

- Although the majority of policies indicated that VO use should be minimized, the only common explicit prohibition in giving verbal orders was for starting chemotherapy.
- All (100%) study hospitals' VO policies required a verbal read-back by the person receiving the order. Of interest were the far less frequent requirements to avoid abbreviations (other than approved drug name and doses), spelling out of the prescribed medication names by either the VO prescriber or receiver, or use of leading and/or trailing zeros when VOs are given.

Specific Aim #2: Obtain estimates of inpatient verbal and telephone order frequency and occurrence based on surveying community hospitals and academic medical centers participating in Specific Aim 1.

The research team was able to meet the objectives of Specific Aim #2 through the administration of a utilization survey. The research team's principal findings for this portion of the research were:

- Over half of the respondents (54.8%) do not collect data related to *face-to-face verbal order use* and *telephone verbal order use*.
- Of those who do collect this data (n=14), 68% indicated that they actually count the number of verbal orders used; there was variability in the frequency of these counts from weekly to every 6 months.
- Finally, all respondents (n=31) were asked if they felt that their verbal order usage was a great deal higher than it should be, somewhat higher than it should be, or about right. Of the facilities that responded (n=28), 10.7 % (n=3) felt that usage was a great deal higher, 64.2% (n=18) felt that it was somewhat higher, and 25.0% (n=7) felt that usage was about right. Interestingly, there was no significant difference between how hospitals rated their VO usage and whether or not they collected data related to face-to-face or telephone verbal orders.

Specific Aim #3: Gain insights into key stakeholders' perceived advantages and disadvantages associated with the use of verbal and telephone orders, explore the extent to which verbal and telephone order policies are followed, and learn how effective such policies are in preventing miscommunications and misunderstandings leading to patient care errors.

The research team was able to meet the objectives of Specific Aim #3 through the administration of a perceptions survey. This survey asked participants to indicate how often they felt verbal order policies were complied with and what causes problems with verbal orders as well as to respond to questions relating to verbal order usage in the respondent's facility, perceptions of when verbal orders are most frequently used, and how their facility's implementation of CPOE (if applicable) had impacted verbal order usage.

- Overall, respondents typically agreed that particular features (documentation of the VO date, time, ordering source; documenting who took the order; documenting if the VO was face to face or by telephone; and performing read-backs of face-to-face and telephone VOs) of their hospital's verbal orders were followed. The exceptions were documenting if

the verbal order was face to face or by telephone (28% of respondents indicated that this feature was followed sometimes, rarely, or never) and performing read-backs (36% indicated that this was followed sometimes or rarely).

- Respondents typically agreed that problems related to verbal order usage (intended order not given / given incorrectly; RN or pharmacist not asking questions about content of order; RN / pharmacist not clarifying if they have a question; RN or pharmacist making an error in transcribing; read-backs not being used; too many orders at once; VO content is too complex) rarely or never occur. However, 20% of respondents did indicate that, when problems arise, they are due to read-backs not being used.
- Regarding VO usage in their hospital, respondents did believe that VOs help physicians, RNs, and pharmacists meet the care needs of patients in a timelier manner but that, in general, physicians do not like having VOs read back to them.
- Most respondents (75%) agreed to some extent that VOs promote communication between physicians, nurses, and pharmacists, but more than half (64%) agreed to some extent that VOs represent frustration for both nurses and pharmacists.
- Overall, the respondents' perceptions are that their VO policies are effective in minimizing errors and in ensuring clear transmission of the intended orders.
- Respondents also felt that, overall, verbal orders are understood by medical staff, nursing staff, and pharmacy staff. However, 36% agreed to some extent that their hospital's VO policies are not effective in their current form and need to be changed.
- CPOE is impacting changes in the usage of VOs. For most, the perceived VO usage had decreased, and there was more compliance since the orders were timed and dated. One hospital, however, felt that their VO use had increased, because their providers felt that CPOE slowed them down.

Discussion

A primary limitation of this study was not analyzing hospitals' medication management-related policies in the study sample. The study sample was relatively small and drew community hospitals from only two states. Potentially, the hospitals general medication management policies may have had references to VOs; if so, these were not examined in this study.

Clarity between VO prescribers and receivers is an ongoing safety concern of healthcare organizations. VO policies are intended to clearly spell out the process by which VOs are given and received within an institution. Respondents to our perceptions survey did feel that their VO policies are effective in minimizing errors and ensuring clear transmission of an intended order. However, these respondents also felt that read-backs are more often linked to problems related to verbal orders and that physicians do not like having VOs read back. Moreover, use of ambiguous terms such as "authorized agents" and "office designees" to identify who is authorized to give VO raises issues of whether a licensed prescriber is giving the VO, or an office staff member is relaying the VO, to the hospital personnel taking the VO. In the case of medications, this raises a number of safety and legal concerns, because neither nurses or pharmacists can accept orders from health professionals whose scope of practice as defined by state licensure does not specifically include the right to prescribe medications. Additionally, existence of an official policy describing the process for giving and receiving a VO does not guarantee similar interpretation by those who use it. We had several instances of differences in

interpreting a hospital policy between study abstractors. Our experience suggests that interpretation differences may also exist among the healthcare providers and hospital employees, particularly among new providers and employees.

Implementation of the electronic health record (EHR) and computerized provider order entry (CPOE) information technology systems will not eliminate VOs, but we found through the utilization survey that they may very well reduce the number of VOs given by prescribers when they are in the hospital and have ready access to the hospital computers. Less clear is the extent to which there may be reductions in telephone VOs when physicians are outside the hospital. For over half of those hospitals that are tracking utilization data, CPOE is clearly being used as a collection tool; however, not all hospitals have a CPOE system, nor have most hospitals figured out how to best track the occurrence and utilization of VOs.

There will continue to be instances when providers will not have access to the EHR and / or CPOE systems and will need to give their orders verbally. Patient situations will arise in which interventions will need to be implemented quickly. In such cases, the provider should not divide his / her attention between caring for the patient and inputting orders. Indeed, the policies of the institutions with CPOE already implemented explicitly allowed VOs in emergency circumstances and in those instances when potential delays would be detrimental to the patient. Because it is likely that VOs will continue to be used for the foreseeable future, specific policies pertaining to VOs in conjunction with new health information and communication technologies will be needed. Our study found one AMC that had already implemented CPOE explicitly stated in its policies that face-to-face VOs will not be allowed and that the prescribers will have to use a computer to enter the orders. As technology becomes increasingly mobile, a question is whether or to what extent telephone orders will not be allowed.

Conclusions – Future Work

Despite their common occurrence, little systematic study of verbal orders has been conducted. The study presented here increases our understanding of the nature and variation of hospitals' VO policies and practices, but a number of questions arise that merit additional research. Three of particular interest are the following.

1. What is the incidence of near misses, adverse events, and/or patient harm events in which a miscommunicated, misunderstood, or mistranscribed VO was a cause?
2. How, and to what extent, is the implementation of CPOE systems generating changes in hospital VO policies and practices?
3. What are the evidence-based VO best practices that hospitals and other healthcare organizations are using to ensure high-quality and safe care?

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List of publications and products

“A Systematic Review of Verbal Order Policies in Acute Care Hospitals.” *The Joint Commission Journal on Quality and Patient Safety*. (Revise and resubmit, received March 10, 2011)

“Hospitals’ Use and Monitoring of Verbal Orders.” Manuscript in preparation.

Appendix A: Verbal Order (VO) Policy and Procedure Audit Form

Hospital:	Audited By:	Audit Date:
Source Document Name:	Last Update:	
1. Medical Staff Bylaws		
2. Medical Staff Rules and Regs		
3. Nursing Policy/Procedure		
4. Pharmacy Policy/Procedure		
5. Hospital Policy/Procedure		
6. Information Technology Dept		
7. Emergency Room		
8. Reference lists/materials/flowcharts		
9.		
10.		

Do the Policies/Procedures differentiate between face-to-face and telephone orders? **Yes No**

If No, then use the first column (face to face) to record responses.

Does the Verbal Order (VO) Policy / Procedure specify who may <u>make and/or take</u> verbal orders?	Face to Face	Telephone	Source Documents	Comment:
Authorized to Make Orders				
1. MD/DO				
2. DDS/OS				
3. Podiatrist				
4. Psychologist				
5. CRNA				
6. PA				
7. Clinical Nurse Specialist				
8. Nurse Practitioner				
9. Pharmacist				
10. Advanced Practice Professional (not specified)				
11. Licensed Independent Practitioner (LIP)				
12. AHP				
13. Licensed prescriber or authorized agent				
14. Office designee				
15.				

Does the Verbal Order (VO) Policy / Procedure specify who may <u>receive</u> verbal orders?	Face to Face	Telephone	Source Documents	Comment:
1. RN				
2. LPN				
3. PA				
4. Clinical Nurse Specialist				
5. Nurse Practitioner				
6. Pharmacist				
7. Advanced Practice Professional (not specified)				
8. RT-registered				
9. RT-certified				
10. Physical Therapist				
11. PT Assistant				
12. Occupational Therapist				
13. OT Assistant				
14. Speech pathologist				
15. Paramedic				
16. Histologist				
17. Cytologist				
18. Medical Technologist				
19. Medical Technician				
20. Lab personnel – not specified				
21. “Nurse” (RN and LPN not differentiated)				
22. Allied Health Professional (not specified)				
23. RT – not differentiated				
24. Dietitian				
25. Radiology personnel (techs)				
26. Activity Therapist				

Does the Verbal Order (VO) Policy / Procedure specify who may <u>receive</u> verbal orders?	Face to Face	Telephone	Source Documents	Comment:
27. Authorized Medical Student				
28. Pharmacy tech				
29. Medical assistant in clinic setting				
30. CV tech in Cath lab				
31. Medical staff / Allied Health Professional				
32. Social worker				
33. CRNA				
34. Graduate Nurse				
35. Audiologist				
36. Licensed or Registered Healthcare Professional				
37.				
38.				
39.				

Section II. Does this document explicitly define and / or list any of the following elements that <u>must be</u> in a complete <i>Verbal Order</i>? (Check Yes or No and indicate source document)	Face to face	Telephone	Source Documents	Comments
1. Defines what constitutes a verbal order	Y / N	Y / N		
<i>If Yes, insert definition:</i>				
2. Requires documenting <u>who received</u> the verbal order	Y / N	Y / N		
3. Requires documenting <u>who gave</u> the verbal order	Y / N	Y / N		
4. Requires that the verbal order <u>time (hour and minute) and date be documented</u>	Y / N	Y / N		
5. Specifies time period in which the verbal order <u>must be co- signed by the prescriber</u> after the order was made	Y / N	Y / N		
6. <i>If Yes, note Required Time Frame to the right:</i> <i>Within: [] 4 hours [] 8 hours [] 12 hours [] 18 hours []</i> <i>24 hours [] 36 hours [] 48 hours [] Other _ hours []</i> <i>Other</i> <i>(please describe)</i>				
7. Communication type (i.e., must document VO, TO)	Y / N	Y / N		
8. Other Requirements (Specify):				

Section III. Does the document explicitly describe any <u>Prohibitions</u> or <u>Limitations</u> in the use of <u>Verbal Orders</u> including:	Face to face	Telephone	Source Documents	Comments
1. Use of chemotherapy in verbal orders	Y / N	Y / N		
2. Radiation therapy orders given as verbal orders	Y / N	Y / N		
3. Use of sound-alike or commonly confused medications in verbal orders	Y / N	Y / N		
4. Use of specific high-risk medications or medication categories in verbal orders	Y / N	Y / N		
5. If Yes, Insert Medication Names / Categories:				
6. Verbal orders are limited to hospital's Formulary Drugs	Y / N	Y / N		
7. Other limitations (Specify):				
8. Additional limitations in the use of Verbal Orders (i.e., in addition to the above limitations) (<u>Check Yes if this is true and then specify these limitations in the comments section</u>)	Y / N	Y / N		

Section IV. Does the Document Describe Any of Following Specific Mechanisms for the Recipient to Authenticate the Prescriber or Otherwise Validate the Verbal Order?	Face to face	Telephone	Source Documents	Comments
1. Requires use of an identification procedure to authenticate the identity of the prescriber	Y / N	Y / N		
2. Requires that prescriber be listed as a Care Provider of record for the specific patient	Y / N	Y / N		
3. Other (Specify):	Y / N	Y / N		
4. Requires when possible that prescriber also faxes copy of <i>telephone verbal order</i> to the pharmacist dispensing the medications		Y / N		
5. Requires when possible that prescriber also faxes copy of <i>telephone verbal order</i> to the nursing unit requesting the medication		Y / N		
6. No specific mechanisms for the recipient to ensure validity or authenticity of the prescriber are specified (i.e., including none of the above apply) (<i>Check Yes if this is true</i>)	Y / N	Y / N		

Section V. Does the Verbal Order Policy Require Some Form of Regular Monitoring and Review of VO Use and/or Ordering Practices	Face to face	Telephone	Source Documents	Comments
1. Provides protocol or instructions for handling "Prescriber Disagreement with documented order	Y / N	Y / N		
2. Requires that unsigned VOs are identified and tracked for follow-up	Y / N	Y / N		
3. Periodic review of VO use and/or appropriateness required	Y / N	Y / N		
4. Other Monitoring or Review (specify)				

Section VI. Does the Document Specify Any of the following to Help Ensure Clear and Effective Communication and Understanding of the Orders?	Face to face	Telephone	Source Documents	Comments
1. Requires read-backs of verbal order	Y / N	Y / N		
2. Requires use of complete words rather than abbreviations other than for drug names and doses	Y / N	Y / N		
3. Requires <u>spelling</u> out medication names by either VO prescriber or receiver	Y / N	Y / N		
4. Prohibits using abbreviations for drug names and doses	Y / N	Y / N		
5. Requires use of leading zeros in VO	Y / N	Y / N		
6. Prohibits use of trailing zeros in VO	Y / N	Y / N		
7. Prohibits VOs being expressed as: "Same meds as at home" or "Same orders, "Same meds" or other similar phrase for Admission or Transfer to a Different Level of Care.	Y / N	Y / N		
8. Other (Specify)				

Appendix B: Hospital Face-to-Face Verbal and Telephone Order Utilization Survey

Thank you again for sending your facility's face-to-face verbal order and telephone order policies and procedures. Your participation in this project is very much appreciated. The purpose of this survey is to supplement the information gained from the review of your facility's policies and procedures. The questions in this survey focus on the collection and use of data related to face-to-face verbal and telephone orders. Individual hospital responses will be kept confidential and only aggregated data will be reported.

Please confirm that the information below is correct and make any changes necessary.

Hospital Name _____

Contact Person: _____ Title: _____

Telephone: (____) _____ - _____ Email: _____

Would you like to receive a copy of the results of this survey? Yes [] No []

If yes, enter your mailing address: _____

1) Does your hospital collect data (e.g., frequency of use, appropriateness of use, adverse events) related to:

- Face-to-Face Verbal Order Use? Yes [] No []
- Telephone Verbal Order Use? Yes [] No []

If you checked "Yes" to either Face-to-Face or Telephone Verbal Orders, how do you collect this data? For instance, use of a CPOE system or other electronic data base, through periodic abstracting of samples of medical records, etc.? Please describe.

If you checked "No" to both face-to-face and telephone verbal orders, please skip to question 4.

2) Please indicate the percent of all orders that are face-to-face or telephone orders for your entire hospital and, if available, for the specific types of patient care units listed below. If you have no verbal order data or estimates of your hospital's verbal order percentages, please check the "Data Not Collected" field. Likewise, if your hospital does not have a similar inpatient unit to the ones listed, please check the "No unit like this" field.

Hospital Area	% of All Orders that are Verbal or Telephone Orders	Data not collected	No unit like this
Hospital Wide			
Adult Inpatient Medicine Unit(s)			
Adult Inpatient Surgery Unit(s)			
Adult Inpatient Medicine Unit(s)			
Adult Inpatient Med/Surg Unit(s)			
Adult Critical Care Unit(s)			
Non-Critical Care Pediatric Unit(s)			

3) Please describe how the face-to-face verbal and telephone order percentages indicated in Question 2 above were determined by answering the following questions.

- Does your hospital use staff estimates of face-to-face verbal order and telephone order use? Yes [] No []
- If yes, skip to Question 4.

- Does your hospital count the **actual annual number** of total face-to-face verbal and telephone orders?

Yes [] No []

- If No, please describe what is counted.

- In measuring face-to-face verbal and telephone orders, does your hospital use any of the following? (Check one response per item)

Periodic and <i>regularly recurring</i> measurements	Yes []	No []
Periodic special samples conducted at irregular intervals	Yes []	No []
Total orders of all types	Yes []	No []
Pharmacy orders only	Yes []	No []

- Please describe other methods used to measure face-to-face verbal and telephone order use in your hospital.

- How frequently do you measure the number of face-to-face verbal and telephone orders in your hospital? Check one of the following, or indicate the time period typically used:

1 Month []
3 Months []
6 Months []
12 Months []
Other (please indicate) _____

- 4) Overall, do you think the percentage of face-to-face verbal and telephone orders for your hospital is (check one of the following):**

A great deal higher than it should be []
Somewhat higher than it should be []
About right []

Please return your survey to Julie Brandt through one of the three options: Center for Health Care Quality, CS&E 547 DC375.00, One Hospital Drive, Columbia, MO 65212; brandtju@health.missouri.edu; or by fax at 573-884-0474.

Thank You!

Appendix C: Verbal Order (VO) Perceptions Questionnaire

Thank you again for taking part in this research on verbal and telephone orders. Your participation in this project is very much appreciated. And we're happy to report that we're in the home stretch. The purpose of this survey is to supplement the information gained from the review of your facility's policies and procedures and the utilization survey you completed earlier this year. The questions in this survey focus on your perceptions of the use of verbal and telephone orders. Individual hospital responses will be kept confidential and only aggregated data will be reported.

Hospital Name: _____ Respondent _____

Your Position (Check One):

CMO/Medical Staff Leader ___

CNO / Director of Nursing ___

Director of Pharmacy ___

Director of Quality / Safety Improvement ___

Other: ___ Please specify: _____

Would you like to receive a copy of the summarized results? Yes ___ No ___

Contact Information: Telephone: (____) _____ - _____ Fax: (____) _____ - _____ Email: _____

1. In general, how often do you feel that the following features <u>of your hospital's verbal order (VO) policies listed below are followed?</u>	Never	Rarely	Some-times	Often	Always	N/A
1.a. Documenting Correct Verbal Order Date						
1.b. Documenting Correct Verbal Order Time						
1.c. Documenting Verbal Order Ordering Source						
1.d. Documenting Verbal Order Staff Taking Order						
1.e. Documenting if Verbal Order was Face-to-Face or by Telephone						
1.f. Performing Read-backs of Telephone Verbal Orders						
1.g. Performing Read-backs of Face-to-Face Verbal Orders						
2. When there is a problem with a verbal or phone order, how often are these problems due to the following factors?	Never	Rarely	Some-times	Often	Always	N/A
2.a. Prescriber giving the order incorrectly - intended order was not given						
2.b. RN or Pharmacist taking the order does not clarify if they have questions about the content of the order						
2.c. RN or Pharmacist does not clarify if they did not understand an order due to accents, noise, or other hearing-related factors						
2.d. RN or Pharmacist made an error in transcribing the order						
2.e. Read-backs were not used						
2.f. Too many individual orders being given at one time						
2.g. The Verbal Order content is complex						

3. This section asks about the extent that you disagree or agree with the following statements related to how verbal orders are used in your hospital.	Strongly Disagree	Moderately Disagree	Disagree a Little	Agree a Little	Moderately Agree	Strongly Agree
3.a. Verbal orders generally help Physicians meet the patients' care needs in a timelier manner.						
3.b. Verbal orders generally help Nurses meet the patients' care needs in a timelier manner.						
3.c. Verbal orders generally help Pharmacists meet the patients' care needs in a timelier manner.						
3.d. Physicians giving verbal orders do not like having the orders read back to them.						
3.e. It is not practical to strictly comply with the hospital's verbal order policies, because it would take too much time.						
3.f. Transcribing verbal orders in the patients' medical records is a significant time burden for Nurses .						
3.g. Transcribing verbal orders in the patients' medical records is a significant time burden for Pharmacists .						
3.h. Finding and co-signing the verbal order is a significant time burden for Physicians .						
4. Verbal orders as currently used in this hospital:	Strongly Disagree	Moderately Disagree	Disagree a Little	Agree a Little	Moderately Agree	Strongly Agree
4.a. Place patients at risk for adverse events or harm.						
4.b. Promote communication between physicians, nurses, and pharmacists.						
4.c. Are consistent with the provision of high-quality care.						
4.d. Frequently interrupt care being given to a patient other than the one for whom the verbal order is intended.						
4.e. Represent a source of frustration for Nurses .						
4.f. Represent a source of frustration for Pharmacists .						
4.g. Arise most often because the nurse contacts the physician about a patient's specific condition or needs.						
4.h. Are made most often as a convenience to the physicians .						
4.i. Are most often for routine, non-urgent or non-emergent care.						

5. Most verbal orders made face-to-face in this hospital occur when the physicians are:	Strongly Disagree	Moderately Disagree	Disagree a Little	Agree a Little	Moderately Agree	Strongly Agree
5.a. Involved in medical emergencies.						
5.b. Doing procedures.						
5.c. Making patient rounds.						
6. Overall, the verbal order policies of this hospital are:	Strongly Disagree	Moderately Disagree	Disagree a Little	Agree a Little	Moderately Agree	Strongly Agree
6.a. Effective in ensuring clear transmission of intended orders.						
6.b. Effective in minimizing the potential for errors and / or adverse events.						
6.c. Well understood by the medical staff.						
6.d. Well understood by the nursing staff.						
6.e. Well understood by the pharmacy staff.						
6.f. Effective in current form and do not need to be changed.						

7. Where is your facility in terms of implementing a CPOE?

- a. ___ Has been implemented (Proceed to question 8)
- b. ___ We are in the process of implementing a CPOE within the next 2 months (Skip to question 9)
- c. ___ Will be implementing a CPOE system more than 2 months from now (Skip to question 9)
- d. ___ No immediate plans for implementing a CPOE

8. Since implementing your CPOE, how has the use of verbal and / or telephone orders changed?

- a. ___ No / minor changes
- b. ___ Moderate changes
- c. ___ Major changes

Please describe the changes.

9. If you are in the process of implementing or are planning to implement a CPOE, how do you anticipate that your verbal and telephone order policies will change?

- a. ___No / minor changes
- b. ___Moderate changes
- c. ___Major changes

Please describe the anticipated changes.

10. Are there any specific issues or areas of concern where you feel your hospital's verbal and phone order policies need to be updated or changed? Yes _ No__

Please identify areas or issues of concern in your hospital's verbal order polices.

Please return your survey to Julie Brandt through one of the three options:

USPS: Center for Health Care Quality
 CS&E 547 DC375.00
 One Hospital Drive
 Columbia, MO 65212

Email: brandtju@health.missouri.edu

FAX: 573-884-0474

Thank You!