



The Imprivata Report on the Economic Impact of Inefficient Communications in Healthcare

Independently conducted by Ponemon Institute^{LLC}

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Ponemon Institute, June 2014

Part 1. Executive Summary

Efficient communication and collaboration amongst physicians, nurses and other providers is critical to the coordination and delivery of patient care, especially given the increasingly mobile nature of today's clinicians and the evolution of the accountable care organization (ACO) model.

For healthcare IT leadership, the ability to satisfy the clinical need for more efficient communications technologies must be balanced with safeguarding protected health information (PHI) to meet compliance and security requirements. As a result, the industry continues to rely primarily on pagers for provider-to-provider communications, which creates inefficiencies that can have a considerable economic and productivity impact.

To quantify this impact, the *Imprivata Report on the Economic Impact of Inefficient Communications in Healthcare* surveyed more than 400 healthcare providers in the U.S. about the typical communication process during three clinical workflows: patient admissions, coordinating emergency response teams and patient transfers.

Respondents overwhelmingly agree that significant time is wasted during each workflow—primarily because of the inefficiency of pagers and the lack of adoption of secure text messaging—which has an estimated annual economic impact of about \$1.75 million per U.S. hospital and more than \$11 billion industry-wide:

- **Patient Admission:** Admitting one patient takes about 51 minutes, of which an average of 33 minutes (65 percent) is wasted due to inefficient communications. This translates into an annual loss of about \$728,000 per U.S. hospital.
- **Emergency Response Coordination:** Coordinating an emergency response team takes an average of 93 minutes per patient. Of this time, an average of 40 minutes (43 percent) is wasted due to inefficient communications. This equates to an annual loss of more than \$265,000 per U.S. hospital.
- **Patient Transfer:** Transferring a patient to another facility or home care/hospice takes an average of about 56 minutes, of which an average of 35 minutes (63 percent) is wasted due to inefficient communications. The total annual cost of this waste is about \$754,000 per U.S. hospital.

Table 1 summarizes the annual productivity and economic impact of this inefficiency. Based on average wages published by the U.S. Bureau of Labor Statistics¹, the estimated labor cost of this inefficiency across these workflows is about \$1.75 million per U.S. hospital per year. Applying this average value to all registered hospitals in the U.S., this translates to an annual estimated industry-wide loss of \$11 billion.

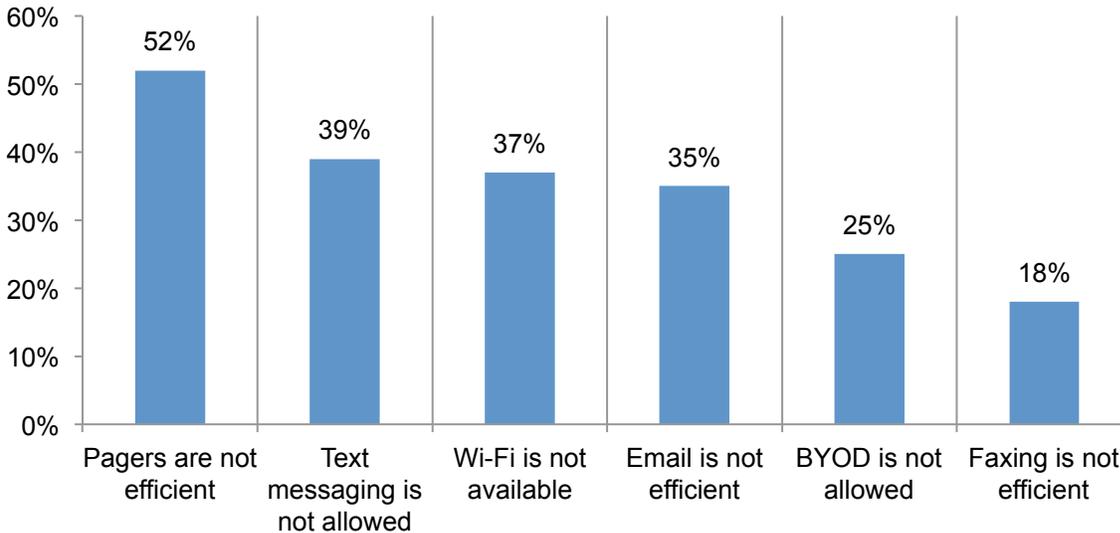
Workflows	Extrapolated annual cost of inefficient time per hospital	Number of registered hospitals ²	Extrapolated annual impact for the industry (US \$billions)
Patient admissions	\$727,957	6,409	\$4.67
Emergency response	\$265,254	6,409	\$1.70
Patient transfers	\$753,755	6,409	\$4.83
Total	\$1,746,966	6,409	\$11.20

¹See: United States Bureau of Labor Statistics, Occupational Employment Statistics May 2012.

²See: American Hospital Association May 2014 Update on the number of registered U.S. hospitals.

As shown in Figure 1, the primary reason for the communications challenges is the inefficiency of pagers (as cited by 52 percent of survey respondents) followed by the inability to use text messaging (39 percent) and lack of Wi-Fi availability (37 percent).

Figure 1. The main reasons why time is wasted when communicating with colleagues
More than one response permitted



Respondents also agree that the use of secure text messaging could increase productivity and minimize about half of the economic loss. Table 2 summarizes the estimated time savings across these workflows by using text messaging and the extrapolated economic value of this time savings, which equates to more than \$918,000 per hospital per year and an industry-wide savings of about \$5.88 billion annually.

Workflows	Estimated time savings using secure text messaging (in minutes)	Extrapolated annual estimated time savings	Number of registered hospitals ³	Extrapolated annual impact for the industry (US \$billions)
Patient admissions	16.3	\$358,598	6,409	\$2.30
Emergency response	21.9	\$144,693	6,409	\$0.93
Patient transfers	19.5	\$414,834	6,409	\$2.66
Total	57.7	\$918,126	6,409	\$5.88

The findings of this research report reveal glaring inefficiencies in provider-to-provider communication, and while the study focuses on three specific areas, it accentuates an industry-wide trend that has substantial productivity and economic impact. It is clear that care providers recognize the deficiencies of pagers and the need to implement more modern solutions such as secure text messaging. It is incumbent on IT to meet provider demand for more modern and efficient communications technologies while maintaining patient privacy and complying with security and regulatory requirements. Successfully striking this balance could boost productivity, reduce costly waste and contribute to better overall patient care. Conversely, if communications inefficiencies in healthcare persist, it is likely that the economic and productivity impact will increase.

³Ibid, Footnote 2

Part 2. Key findings

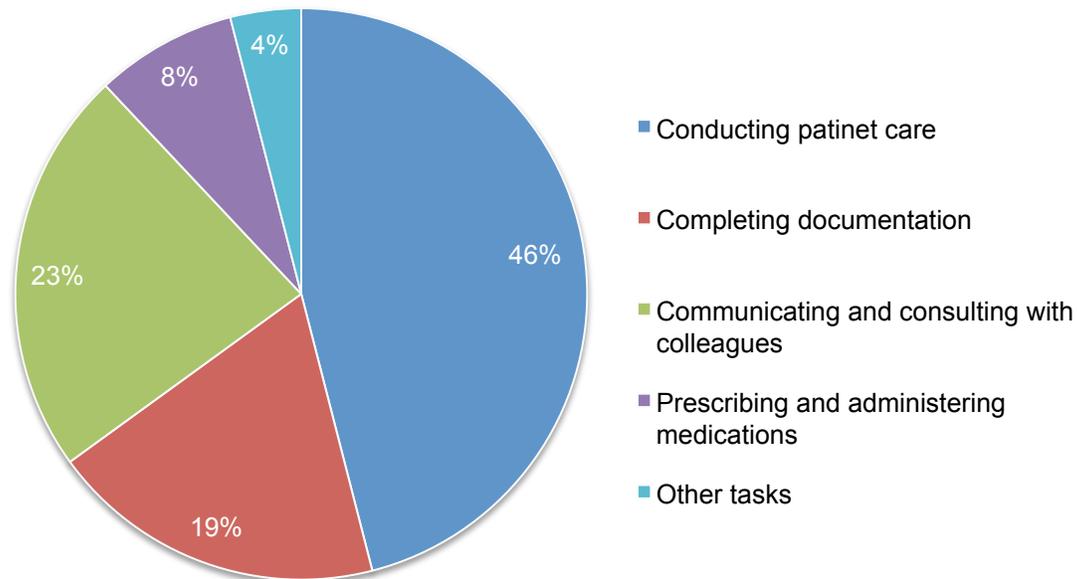
This report organizes the study findings according to the following topics:

- General perceptions of the inefficiencies in the healthcare delivery process
- The economic and productivity impact of outdated communications technology in healthcare, focused on three workflows: patient admissions, coordinating emergency response teams and patient transfers
- The importance of communications efficiency for ACOs

General Perceptions of the Inefficiencies in the Healthcare Delivery Process

According to the study, care providers spend an average of 46 percent of their time on direct patient care, 23 percent on communicating or consulting with colleagues and the remainder on various other activities. Figure 2 summarizes how respondents in our study spend their time in the typical workday.

Figure 2. How respondents spend their time



For each of these activities, respondents were asked to quantify how much time is wasted due to inefficient systems and workflows. Figure 3 provides these estimates, measured in minutes per day. According to respondents, approximately 35 minutes each day are wasted when conducting patient care, 19 minutes are wasted when completing documentation and 24 minutes are wasted when communicating and consulting with colleagues. Additionally, 13 minutes are wasted when prescribing and/or administering medications. Taken together, respondents acknowledge 91 minutes of wasted time each day because of inefficient systems and workflows.

Figure 3. Estimated time wasted due to inefficient systems and workflows
Measured in minutes per day

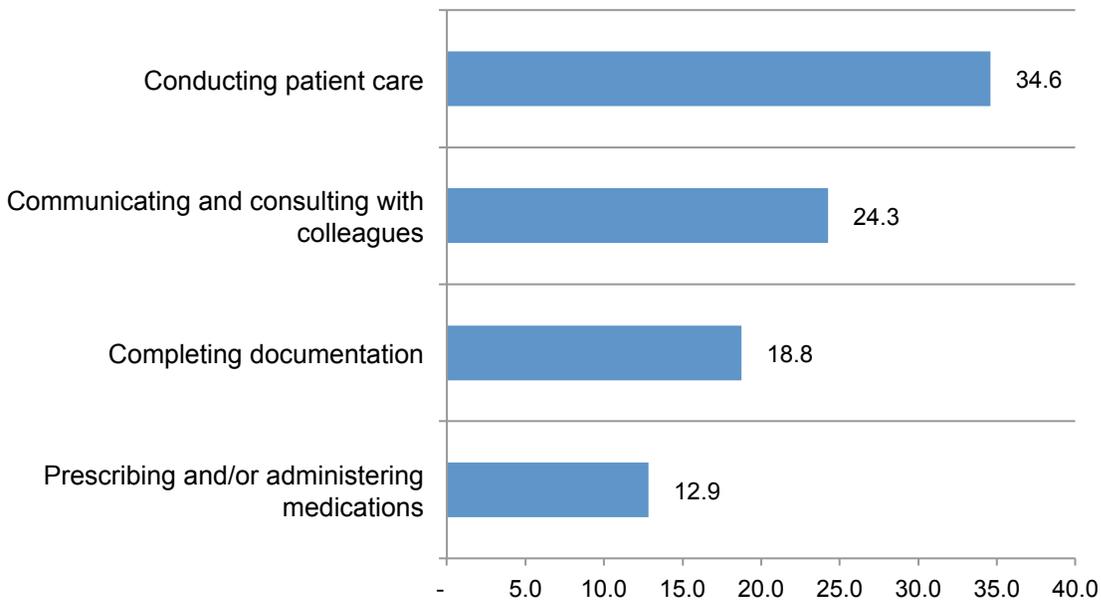
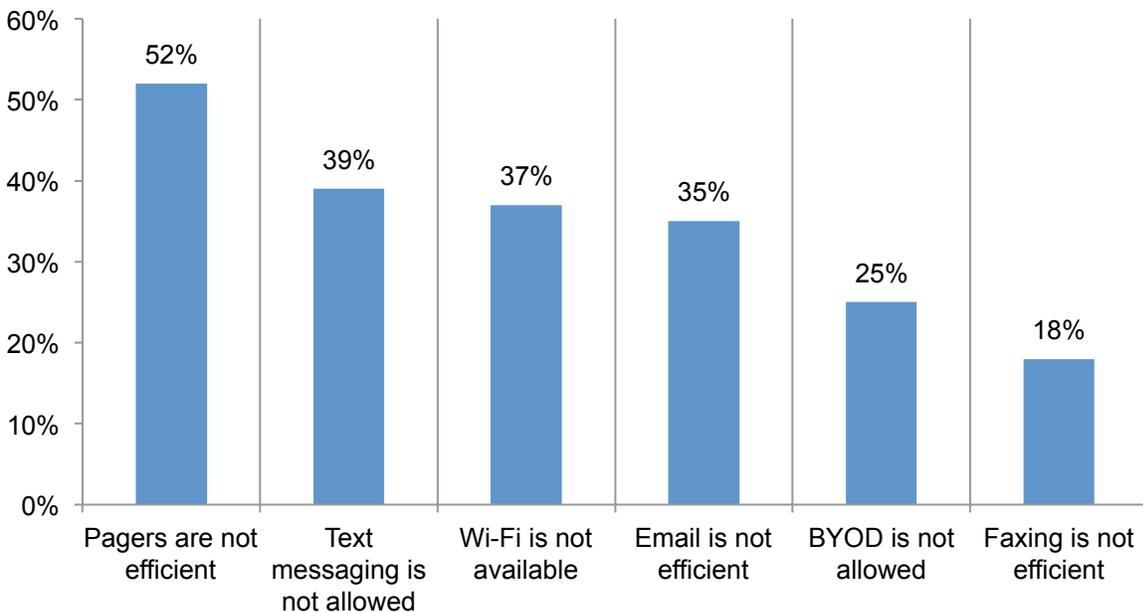


Figure 4 summarizes primary reasons why respondents' time is wasted during the typical workday. As shown, 52 percent indicate that the use of pagers leads to inefficiencies in the healthcare environment. Similarly, not permitting text messaging (39 percent) or Wi-Fi (37 percent) within the organization leads to potential time inefficiencies.

Figure 4. The main reasons why time is wasted when communicating with colleagues
More than one response permitted



The Economic and Productivity Impact of Outdated Communications Technology in Healthcare

Patient Admissions: For this study, patient admissions is defined as the throughput process of when a patient first arrives at the facility to when they are placed in an in-patient room, operating room or other care setting.

This section estimates the costs associated with the time that respondents indicate is wasted during the patient admission process. For the present sample of respondents' organizations, the extrapolated number of patient admissions per day is about 102.1.

Respondents were asked how much total time (in minutes) that clinical, operational and administrative staff collectively spend admitting just one patient. Respondents were then asked how much time (in minutes) of this total is wasted due to inefficient communications, and how much time could be saved using text messaging. Figure 5 shows the average times given by respondents

Figure 5. Productivity impact of inefficient communication during the patient admissions process
Measured in minutes

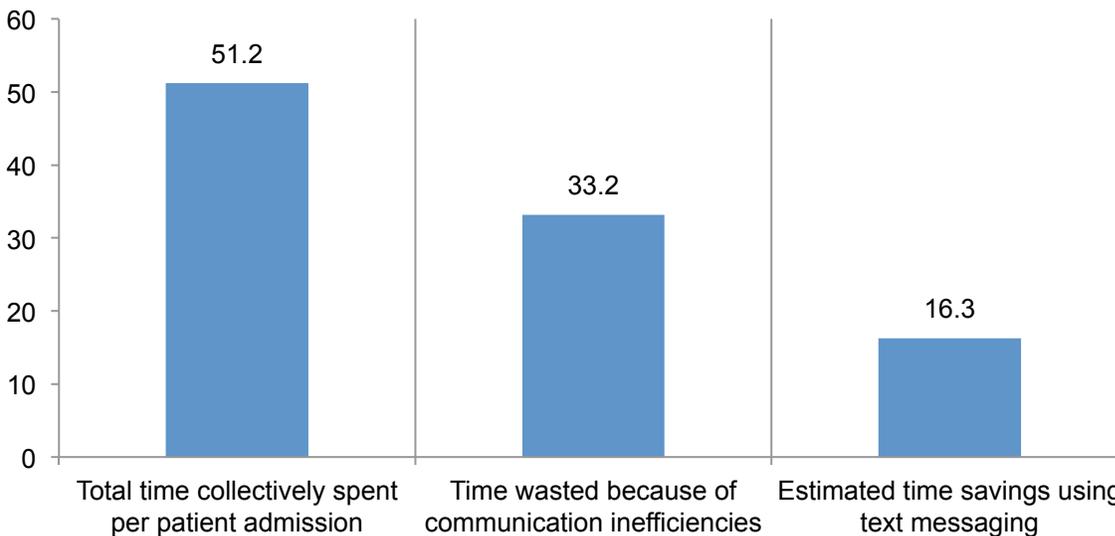


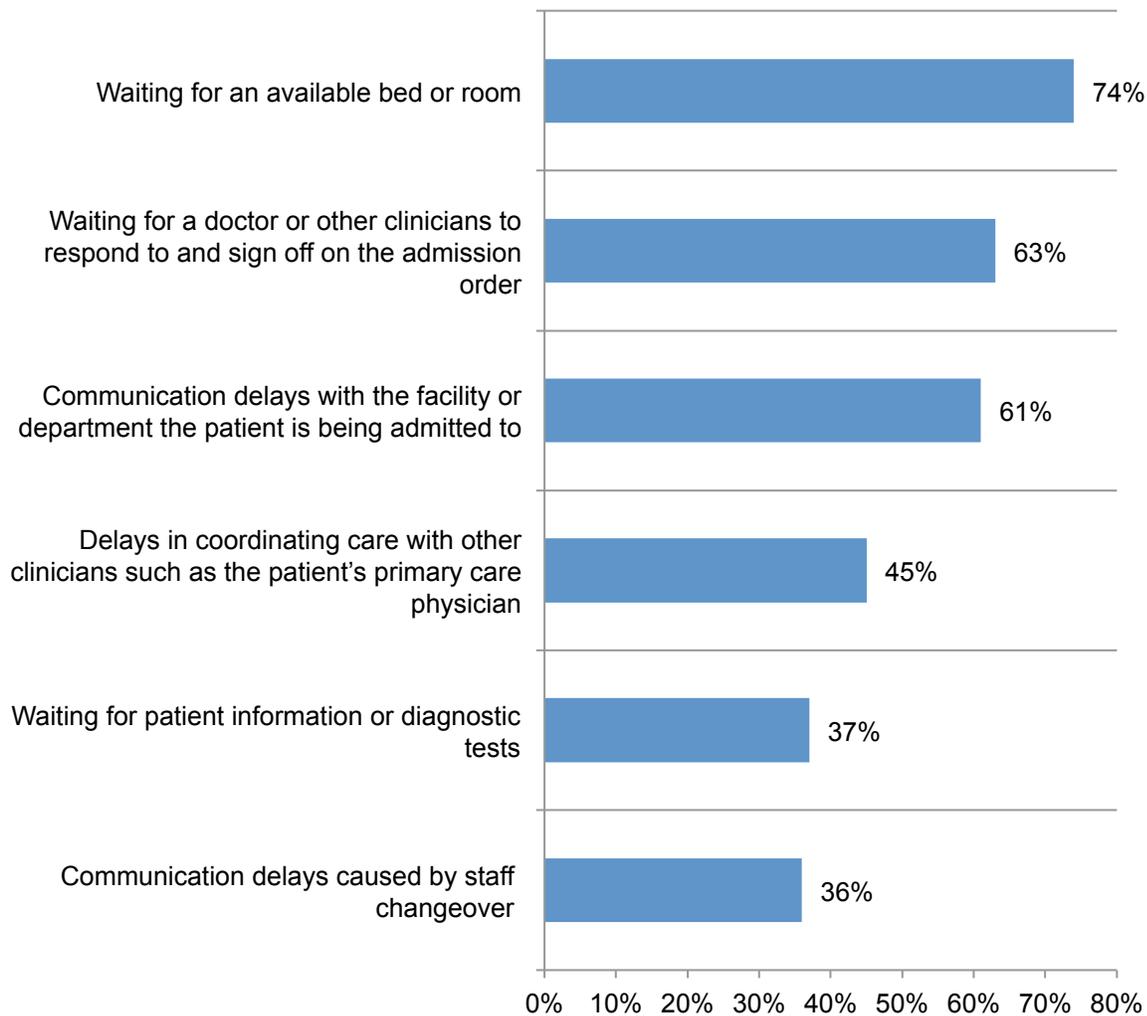
Table 3 provides the economic impact of communication inefficiencies during the patient admission process. The estimated annual cost of wasted time is \$727,957 per hospital, translating to an industry-wide loss of about \$4.17 billion per year. The annual economic value of the estimate time savings using text messaging is \$358,598 per hospital, equating to a potential industry-wide savings of \$2.05 billion.

Patient admissions workflow	Minutes per patient	Minutes per day	Hours per year*	Annual labor cost*
Total time collectively spent per patient admission	51.2	5,223.2	31,774.5	\$1,123,228
Time wasted because of communication inefficiencies	33.2	3,385.1	20,592.8	\$727,957
Time saved by effective communication	16.3	1,667.5	10,144.2	\$358,598

*Assumes a wage rate of \$35.35 for combined clinical and medical administration personnel

Figure 6 reports the main reasons for communication inefficiency and wasted time during the patient admission process. The primary culprit is waiting for an available bed or room (as cited by 74 percent of respondents), followed by waiting for a doctor or other clinician to respond to and sign off on the admission order (63 percent) and communication delays with the facility or department to which the patient is being admitted (61 percent).

Figure 6. The main reasons for inefficient communication during the patient admission process
More than one response permitted



Emergency response team coordination: For this study, emergency response teams include rapid response, code, trigger, cardiac catheterization, stroke activation, trauma activation and emergency management response teams.

This section estimates the costs associated with the wasted time in coordinating the emergency response team. For the present sample of respondents' organizations, the extrapolated total number of patient emergency events per day is 30.7.

Respondents were asked how much total time (in minutes) that clinical, operational and administrative staff collectively spend coordinating emergency care for just one patient. Respondents were then asked how much time (in minutes) of this total is wasted due to inefficient communications, and how much time could be saved using text messaging. Figure 7 shows the average times given by respondents.

Figure 7. Productivity impact of communication inefficiency on emergency response team coordination

Measured in minutes

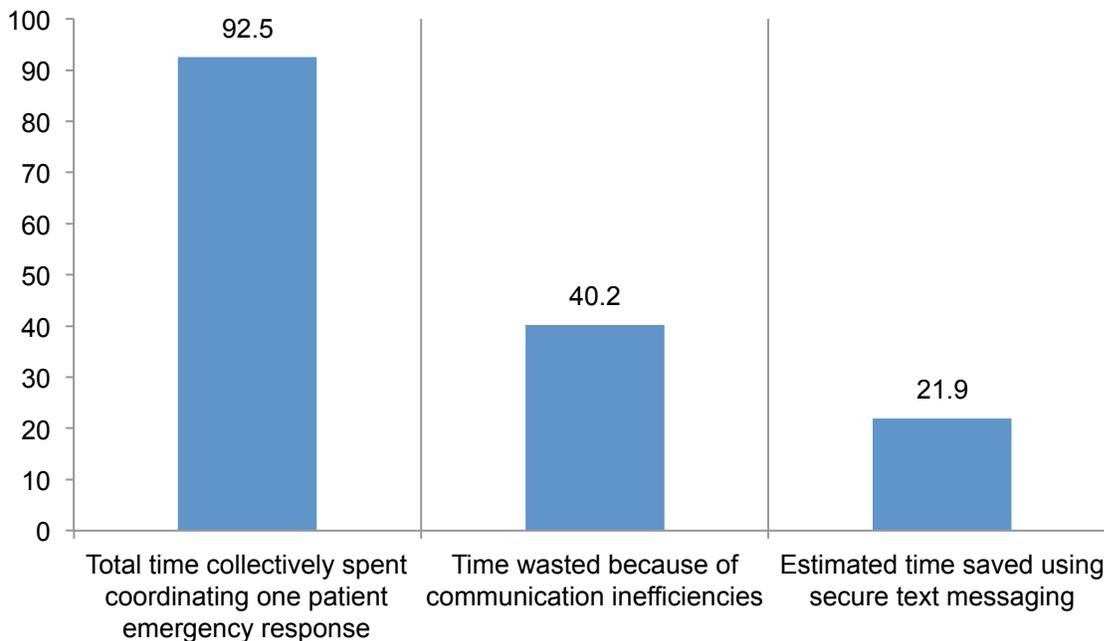


Table 4 provides the economic impact of communication inefficiencies during the emergency response team coordination process. The estimated annual cost of this wasted time is \$265,245 per hospital, translating to an industry-wide loss of about \$1.52 billion annually. The annual economic value of the estimated time savings using text messaging is \$144,693 per hospital, equating to a potential savings of \$830 million across the healthcare industry.

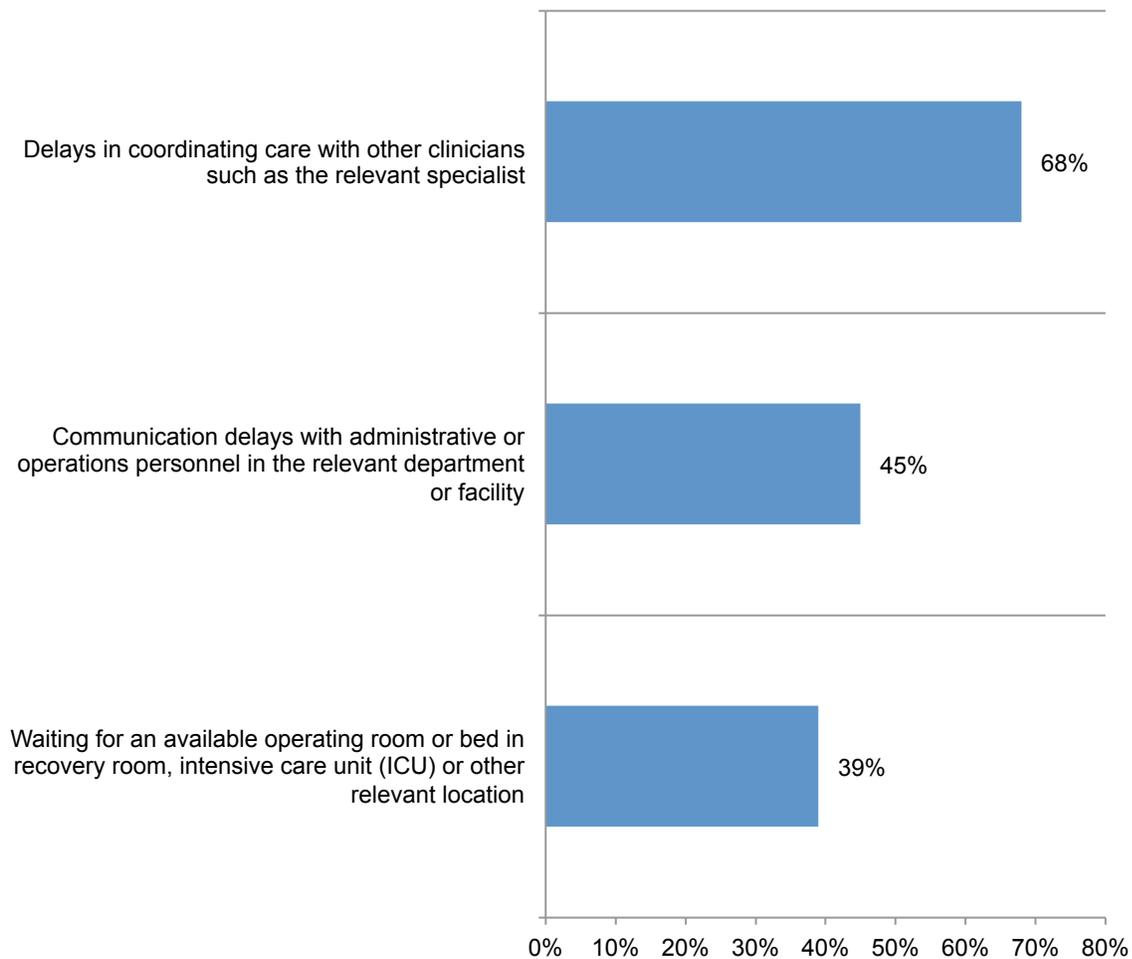
ERT coordination workflow	Minutes per patient	Minutes per day	Hours per year	Annual labor cost*
Total time collectively spent coordinating one patient emergency response	92.5	2,838.50	17,267.80	610,415
Time wasted because of communication inefficiencies	40.2	1,233.50	7,503.70	265,254
Time saved by effective communication	21.9	672.8	4,093.10	144,693

*Assumes a wage rate of \$35.35 for combined clinical and medical administration personnel

Figure 8 provides the main reasons for communication inefficiency during emergency care coordination. The primary reason is delays in coordinating care with other clinicians and specialists (as cited by 68 percent of respondents), followed by communication delays with administrative or operations personnel in the relevant department or facility (45 percent).

Figure 8. The main reasons for inefficient communication when coordinating emergency response teams

More than one response permitted



Patient transfers: For the purposes of this study, the patient transfer process pertains to transfers to other healthcare facilities or to home care or to hospice, and the measured timeframe of a patient transfer is when the decision is made to transfer until the patient is officially no longer in that facility's care.

This section estimates the costs associated with the wasted time during the patient transfer process. For the present sample of respondents' organizations, the extrapolated total number of patient transfers per day is 99.2.

Respondents were asked how much total time (in minutes) that clinical, operational and administrative staff collectively spend transferring just one patient. Respondents were then asked how much time (in minutes) of this total is wasted due to inefficient communications, and how much time could be saved using text messaging. Figure 9 shows the average times given by respondents.

Figure 9. Productivity impact of communication inefficiency during the patient transfer process
Measured in minutes

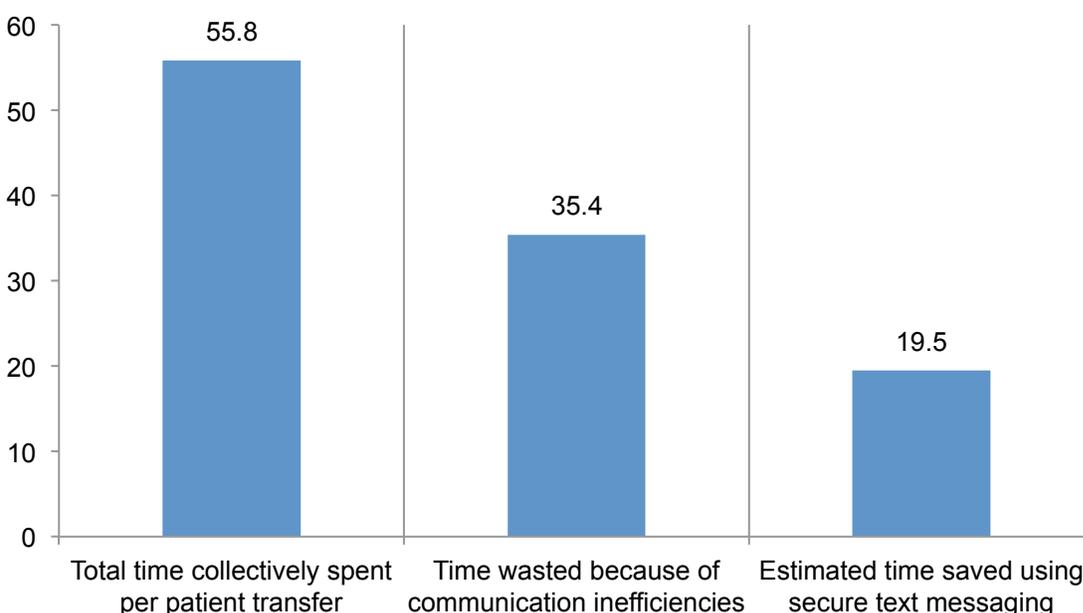


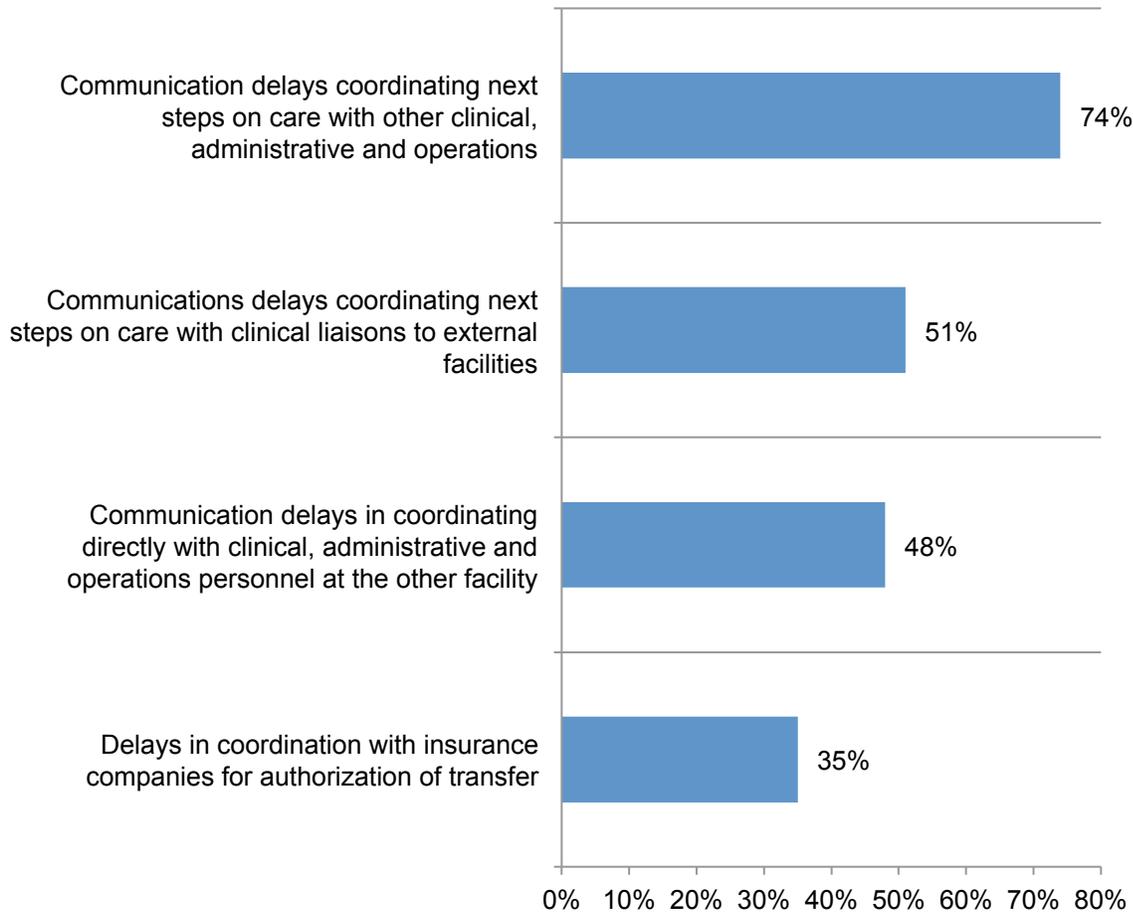
Table 5 provides the economic impact of communication inefficiencies during the patient transfer process. The estimated annual cost of this wasted time is \$753,755 per hospital, translating to an industry-wide loss of about \$4.31 billion annually. The annual economic value of the estimated time savings using text messaging is \$414,834 per hospital, equating to a potential savings of \$2.37 billion across the healthcare industry.

Patient admissions workflow	Minutes per patient	Minutes per day	Hours per year	Annual labor cost*
Total time collectively spent per patient admission	55.8	5,532.8	33,657.8	\$1,189,802
Time wasted because of communication inefficiencies	35.4	3,505.1	21,322.6	\$753,755
Time saved by effective communication	19.5	1,929.1	11,735.1	\$414,834

*Assumes a wage rate of \$35.35 for combined clinical and medical administration personnel

Figure 10 provides the main reasons for communication inefficiency during the patient transfer process. The primary reason is communications delays coordinating next steps on care with other clinical, administrative and operations personnel internally (as cited by 74 percent of respondents), followed by communications delays coordinating next steps on care with clinical liaisons to external facilities (51 percent).

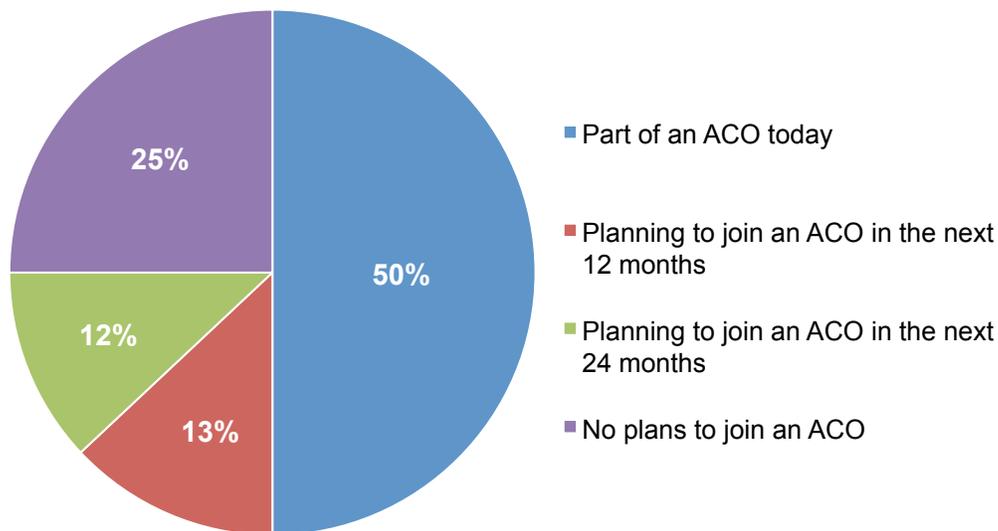
Figure 10. The main reasons for inefficient communication during the patient transfer process
More than one response permitted



Communications Efficiency in Accountable Care Organizations

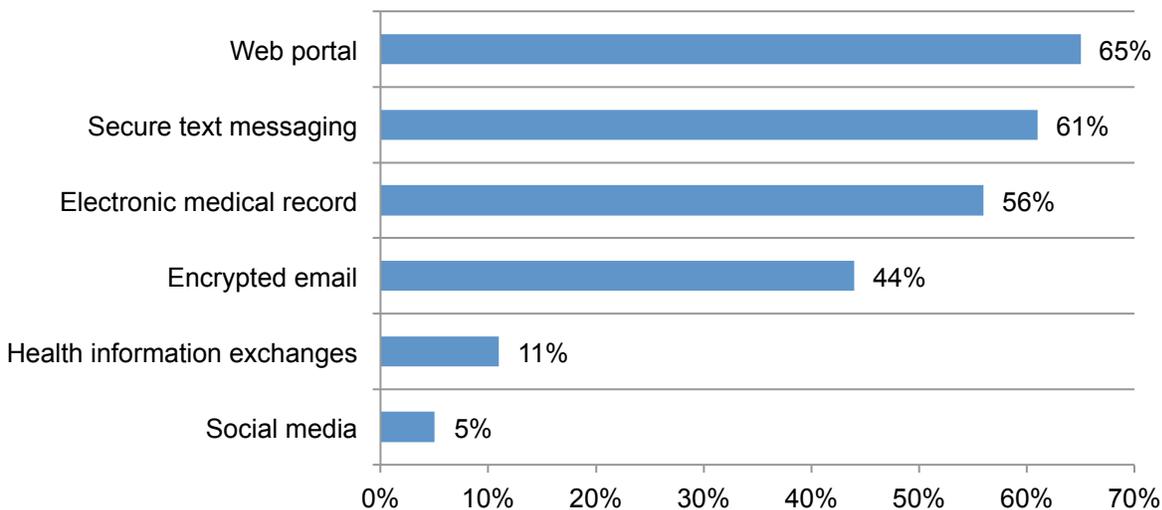
Respondents were also asked about their involvement in accountable care organizations (ACOs) to determine the importance of efficient communication in this model. As shown in Figure 11, 50 percent of respondents say their organization is currently part of an ACO, and another 25 percent indicate that their organization plans to join an ACO within the next two years.

Figure 11. Transition to the ACO model. Is your organization part of an ACO today?



For organizations that are part of an ACO today, the average number of facilities within the ACO is about 20, supporting the need for efficient communications amongst the participants. As shown in figure 12, respondents indicate that the most important tool for effective communications within an ACO is a Web portals (as cited by 65 percent of respondents), followed by secure text messaging (61 percent) and electronic medical records (56 percent).

Figure 12. Tools to achieving effective communications among ACO participants
More than one response permitted



Part 3. Methods

A sampling frame of 5,905 healthcare professionals located in all regions of the United States was selected as participants to this survey. As shown in Table 7, 457 respondents completed the survey. Screening and reliability checks removed 56 surveys. The final sample was 401 surveys, or a 6.8 percent response rate.

Survey response	Freq	Pct%
Sampling frame	5,905	100.0%
Total returns	457	7.7%
Rejected or screened surveys	56	0.9%
Final sample	401	6.8%

Figure 13 provides respondents' role within their organization, Figure 15 breaks down respondents by type of organization and Figure 16 reports bed size.

Figure 13. Respondents by organizational role or function

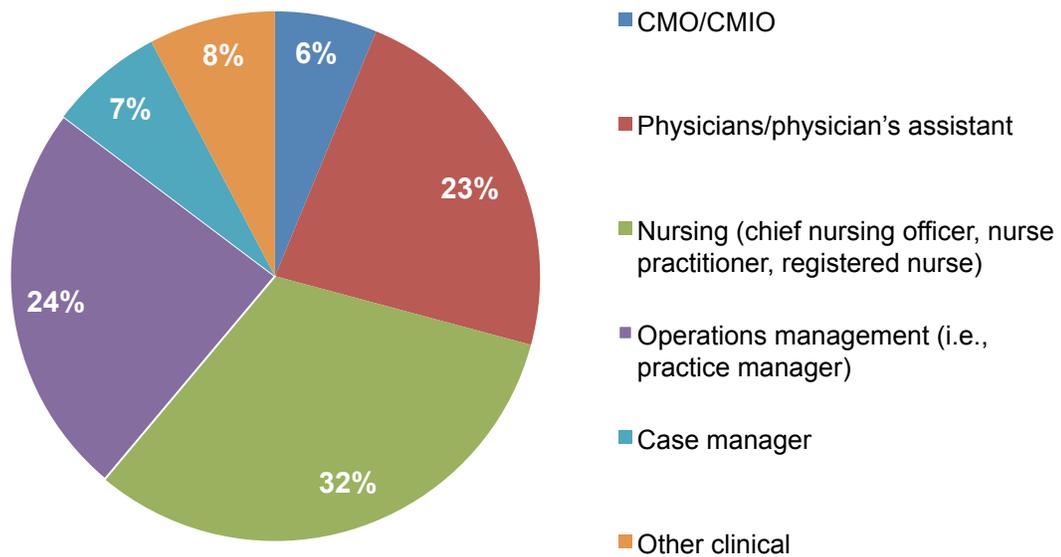


Figure 14. Respondents by type of organization
More than one response permitted

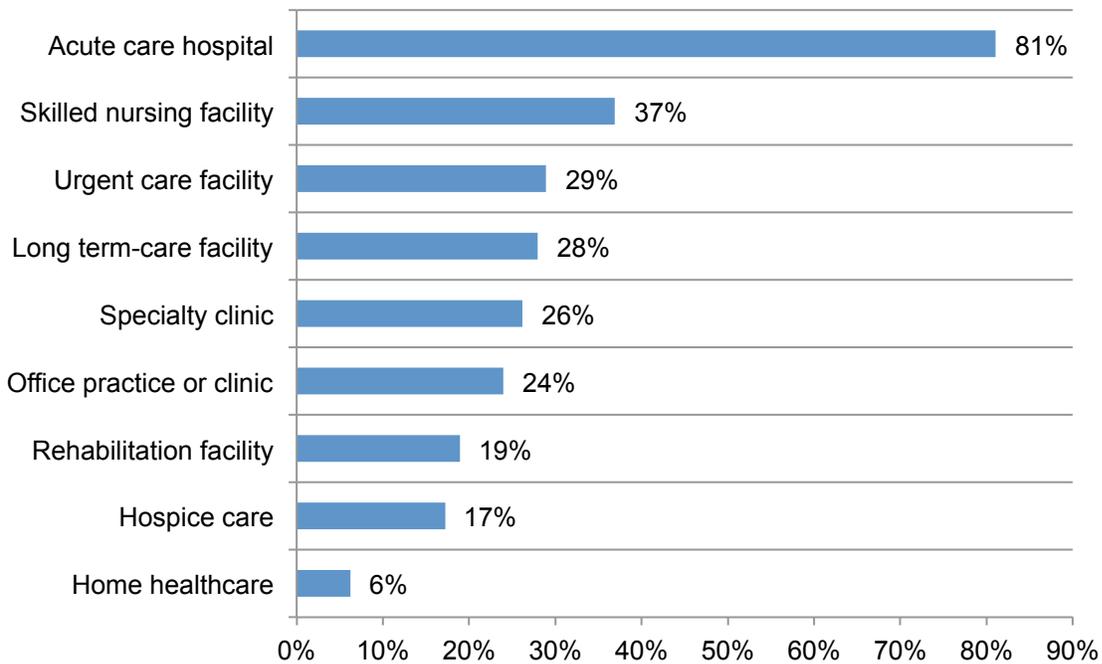
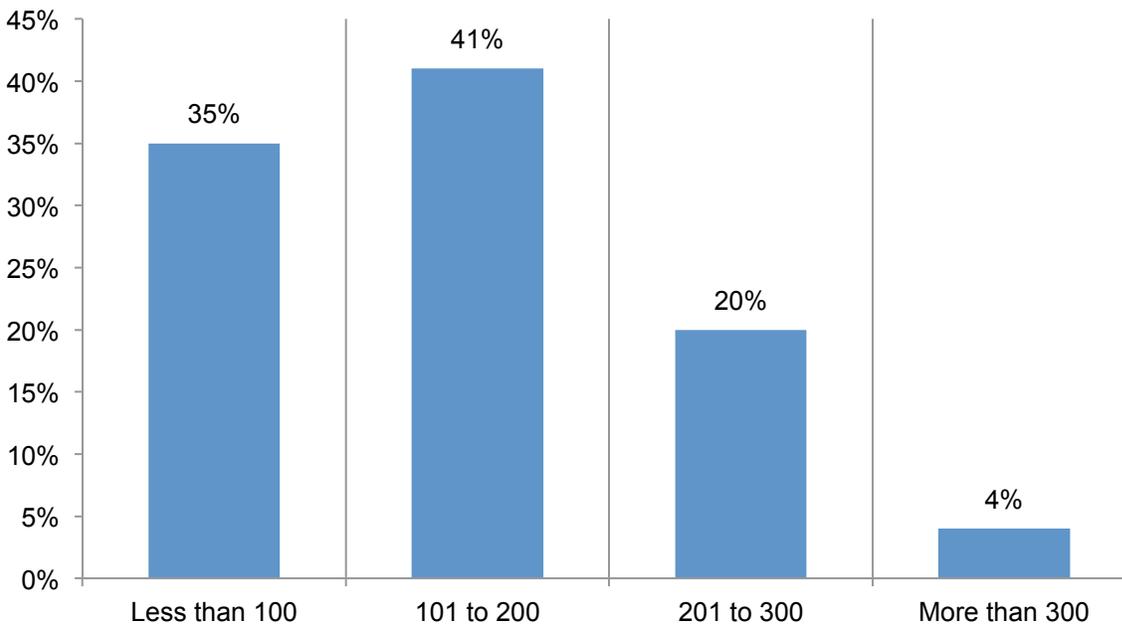


Figure 15: Patient beds (capacity) at respondents' healthcare facility
*60 outpatient ambulatory organizations are removed from this analysis



Part 4. Caveats

There are inherent limitations to survey research that need to be carefully considered before drawing inferences from findings. The following items are specific limitations that are germane to most web-based surveys.

Non-response bias: The current findings are based on a sample of survey returns. We sent surveys to a representative sample of individuals, resulting in a large number of usable returned responses. Despite non-response tests, it is always possible that individuals who did not participate are substantially different in terms of underlying beliefs from those who completed the instrument.

Sampling-frame bias: The accuracy is based on contact information and the degree to which the list is representative of individuals who are healthcare professionals. We also acknowledge that the results may be biased by external events such as media coverage. We also acknowledge bias caused by compensating subjects to complete this research within a holdout period.

Self-reported results: The quality of survey research is based on the integrity of confidential responses received from subjects. While certain checks and balances can be incorporated into the survey process, there is always the possibility that a subject did not provide a truthful response.

Appendix: Detailed Survey Results

The following tables provide the frequency or percentage frequency of responses to all survey questions contained in this study. All survey responses were captured in April 2014.

Part 1. Screening questions

S1. What one functional area best describes your position or role within the organization?	Freq
Chief medical information officer (CMIO)/Chief medical officer (CMO)	25
Physicians/physician's assistant	92
Nursing (chief nursing officer, nurse practitioner, registered nurse)	128
Operations management (i.e., practice manager)	97
Case manager	28
Other clinical (please specify)	31
None of the above (stop)	0
Total	401

S2. What best describes the organization(s) at which you work? Please select all that apply.	Freq
Acute care hospital	325
Skilled nursing facility	148
Urgent care facility	116
Long term-care facility	112
Hospice care	69
Rehabilitation facility	76
Home healthcare	25
Office practice or clinic	96
Specialty clinic	105
Other	6
None of the above (stop)	0

Part 2: Inefficiencies in healthcare delivery

Q1. In a typical workday, what percentage of your time is spent performing the following tasks? Please allocate a total of 100 points to the tasks indicated in the table.	Total time spent
Conducting patient care	46
Completing documentation	19
Communicating and consulting with colleagues	23
Prescribing and administering medications	8
All other tasks	4
Total	100

Q2. In a typical workday, how much time do you believe is wasted due to inefficient systems and workflows for each of these four tasks (in minutes)?	
Q2a. Conducting patient care	Pct%
No wasted time	2%
1 to 10 minutes	15%
11 to 20 minutes	21%
21 to 30 minutes	26%
31 to 60 minutes	20%
61 to 90 minutes	8%
90 to 120 minutes	5%
More than 120 minutes	3%
Total	100%

Q2b. Completing documentation	Pct%
No wasted time	5%
1 to 10 minutes	23%
11 to 20 minutes	34%
21 to 30 minutes	29%
31 to 60 minutes	6%
61 to 90 minutes	2%
90 to 120 minutes	1%
More than 120 minutes	0%
Total	100%

Q2c. Communicating and consulting with colleagues	Pct%
No wasted time	5%
1 to 10 minutes	18%
11 to 20 minutes	23%
21 to 30 minutes	34%
31 to 60 minutes	13%
61 to 90 minutes	6%
90 to 120 minutes	1%
More than 120 minutes	0%
Total	100%

Q2d. Prescribing and/or administering medications	Pct%
No wasted time	15%
1 to 10 minutes	34%
11 to 20 minutes	26%
21 to 30 minutes	20%
31 to 60 minutes	5%
61 to 90 minutes	0%
90 to 120 minutes	0%
More than 120 minutes	0%
Total	100%

Part 3: Communication workflows	
Q3. What are the main reasons why time is wasted when communicating with colleagues? Please select the top two reasons.	Pct%
Pagers are not efficient	52%
Email is not efficient	35%
Wi-Fi is not available	37%
Text messaging is not allowed	39%
Personal mobile devices (BYOD) are not allowed	25%
Faxing is not efficient	18%
Other	3%
Total	209%

Q4. On average, how much faster (in minutes) would you receive a response from a colleague using text messages versus paging?	Pct%
No difference	25%
1 to 5 minutes	36%
6 to 10 minutes	24%
11 to 20 minutes	12%
21 to 30 minutes	2%
31 to 60 minutes	1%
61 to 90 minutes	0%
More than 90 minutes	0%
Total	100%

Part 4: Patient admissions	
Q5. In a typical day (24 hours), how many patients are admitted to your hospital or clinic?	Pct%
Less than 10	5%
10 to 50	26%
51 to 100	21%
101 to 200	14%
250 to 300	9%
More than 300	3%
Not applicable (skip to Q10)	22%
Total	100%

Q6. On average, how much total time (in minutes) does the clinical, operational and administrative staff collectively spend admitting just one patient?	Pct%
None (skip to Q10)	0%
1 to 10 minutes	12%
11 to 20 minutes	17%
21 to 30 minutes	18%
31 to 60 minutes	18%
61 to 90 minutes	17%
90 to 120 minutes	13%
120 to 240 minutes	5%
More than 240 minutes	0%
Total	100%

Q7. On average, how much time (in minutes) is wasted due to inefficient communications during the patient admissions process?	Pct%
No wasted time (skip to Q10)	11%
1 to 10 minutes	12%
11 to 20 minutes	15%
21 to 30 minutes	18%
31 to 60 minutes	29%
61 to 90 minutes	10%
90 to 120 minutes	5%
More than 120 minutes	0%
Total	100%

Q8. What are the main reasons for inefficient communication during the patient admission process? Please select all that apply.	Pct%
Delays in coordinating care with other clinicians such as the patient's primary care physician	45%
Waiting for a doctor or other clinicians to respond to and sign off on the admission order	63%
Waiting for patient information (i.e., diagnostic test results)	37%
Communication delays with the facility or department the patient is being admitted to	61%
Communication delays caused by staff changeover	36%
Waiting for an available bed or room	74%
Other	3%
Total	319%

Q9. On average, how much time (in minutes) would be saved during each patient admission if you and your colleagues were able use text messaging to communicate?	Pct%
None	0%
1 to 2 minutes	1%
3 to 4 minutes	2%
5 to 6 minutes	5%
7 to 8 minutes	6%
9 to 10 minutes	8%
10 to 30 minutes	21%
More than 30 minutes	32%
Not applicable (already using text messaging)	25%
Total	100%

Recap on patient admissions	
Number of patients/events per day	102.1
Total time collectively spent per patient/event	51.2
Time wasted because of communication inefficiencies	33.2
Time saved if text messaging was utilized to communicate with colleagues	16.3

Part 5: Coordinating emergency response teams	
Q10. In a typical day (24 hours), how many patients receive care from an emergency response team (as defined above) in your hospital or clinic?	Pct%
Less than 10	31%
10 to 50	34%
51 to 100	13%
101 to 250	1%
More than 250	0%
Not applicable (skip to Q15)	21%
Total	100%

Q11. On average, how much total time (in minutes) does the collective clinical, operations and administrative staff spend coordinating an emergency response team for just one patient?	Pct%
None (skip to Q15)	0%
1 to 10 minutes	0%
11 to 20 minutes	1%
21 to 30 minutes	5%
31 to 60 minutes	16%
61 to 90 minutes	37%
90 to 120 minutes	28%
120 to 240 minutes	9%
More than 240 minutes	4%
Total	100%

Q12. On average, how much time (in minutes) is wasted due to inefficient communications?	Pct%
No wasted time (skip to Q15)	2%
1 to 10 minutes	11%
11 to 20 minutes	15%
21 to 30 minutes	23%
31 to 60 minutes	26%
61 to 90 minutes	14%
90 to 120 minutes	9%
More than 120 minutes	0%
Total	100%

Q13. What are the main reasons for inefficient communication during the coordination of emergency response teams? Please select all that apply.	Pct%
Delays in coordinating care with other clinicians such as the relevant specialist	68%
Communication delays with administrative or operations personnel in the relevant department or facility	45%
Waiting for an available operating room or bed in recovery room, intensive care unit (ICU) or other relevant location	39%
Other	5%
Total	157%

Q14. On average, how much time (in minutes) would be saved during the coordination of the emergency response team if you were able to use text messaging to communicate with colleagues?	Pct%
None	0%
1 to 2 minutes	0%
3 to 4 minutes	2%
5 to 6 minutes	3%
7 to 8 minutes	5%
9 to 10 minutes	11%
10 to 30 minutes	25%
More than 30 minutes	31%
Not applicable (already using text messaging)	23%
Total	100%

Recap on coordinating emergency response teams	
Number of patients/events per day	30.7
Total time collectively spent per patient/event	92.5
Time wasted because of communication inefficiencies	40.2
Time saved if text messaging was utilized to communicate with colleagues	21.9

Part 6: Patient transfers	
Q15. In a typical day (24 hours), how many patients are transferred from your organization to another facility such as other hospitals, skilled nursing facilities, rehabilitation centers, long-term care facilities and assisted living centers? Also, include patient transfers from your organization to home or hospice care in your estimate.	Pct%
Less than 10	6%
10 to 50	25%
51 to 100	21%
101 to 200	17%
250 to 300	9%
More than 300	1%
Not applicable (skip to Q20)	21%
Total	100%

Q16. On average, how much total time (in minutes) does the collective clinical, operations and administrative staff spend transferring one patient to another healthcare facility or home/hospice care?	Pct%
None (skip to Q20)	2%
1 to 10 minutes	6%
11 to 20 minutes	9%
21 to 30 minutes	12%
31 to 60 minutes	34%
61 to 90 minutes	20%
90 to 120 minutes	13%
120 to 240 minutes	4%
More than 240 minutes	0%
Total	100%

Q17. On average, how much time (in minutes) transferring a patient to another healthcare facility or home/hospice care is wasted due to inefficient communications?	Pct%
No wasted time (skip to Q20)	5%
1 to 10 minutes	10%
11 to 20 minutes	10%
21 to 30 minutes	29%
31 to 60 minutes	31%
61 to 90 minutes	12%
90 to 120 minutes	3%
More than 120 minutes	0%
Total	100%

Q18. What are the main reasons for inefficient communication during the patient transfer process (either to another facility or to home/hospice care)? Please select all that apply.	Pct%
Delays in coordination with insurance companies for authorization of transfer	35%
Communications delays coordinating next steps on care with other clinical, administrative and operations personnel internally	74%
Communications delays coordinating next steps on care with clinical liaisons to external facilities	51%
Communications delays in coordinating directly with clinical, administrative and operations personnel at the other external relevant facility/facilities	48%
Other	5%
Not applicable	29%
Total	242%

Q19. On average, how much time (in minutes) would be saved during the patient transfer process if you were able to use text messaging to communicate with colleagues?	Pct%
None	0%
1 to 2 minutes	0%
3 to 4 minutes	0%
5 to 6 minutes	1%
7 to 8 minutes	6%
9 to 10 minutes	24%
10 to 30 minutes	24%
More than 30 minutes	23%
Not applicable (already using text messaging)	22%
Total	100%

Recap on patient transfers	
Number of patients/events per day	99.2
Total time collectively spent per patient/event	55.8
Time wasted because of communication inefficiencies	35.4
Time saved if text messaging was utilized to communicate with colleagues	19.5

Part 7: Accountable care organization

Q20. Is your facility part of an ACO?	Pct%
Yes	50%
No but planning to in next 12 months	12%
No but planning to in next 12-24 months	13%
No (skip to Part 8)	25%
Total	100%

Q21. Approximately how many different facilities comprise your ACO (where entities include hospitals, rehabilitation facilities, ambulatory centers, office practices, physicians groups, etc.)?	Pct%
1 to 5	8%
6 to 10	13%
11 to 15	26%
16 to 20	13%
21 to 30	20%
31 to 40	12%
41 to 50	4%
More than 50	4%
Total	100%

Q22. Which of the following tools do you believe are most important to achieving effective communications among ACO participants? Please provide your top two choices.	Pct%
Web portal	65%
Encrypted email	44%
Electronic medical record	56%
Secure text messaging	61%
Health Information Exchanges (HIE)	11%
Social media	5%
Other	0%
Total	242%

Part 8. Organizational characteristics

D1. What best describes your organization.	Pct%
Public healthcare provider	40%
Private healthcare provider	49%
Other	11%
Total	100%

D2. What best describes your organization's operating structure?	Pct%
Healthcare system	36%
Community hospital (standalone)	45%
Outpatient ambulatory services	15%
Other	4%
Total	100%

D3. How many patient beds (capacity) does your healthcare facility or organization have?	Pct%
Less than 100	35%
101 to 200	41%
201 to 300	20%
More than 300	4%
Total	100%

D4. US region where your healthcare organization is located.	Pct%
Northeast	20%
Mid-Atlantic	18%
Midwest	16%
Southeast	14%
Southwest	13%
Pacific-West	19%
Total	100%

Ponemon Institute

Advancing Responsible Information Management

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