# Safety Attitudes in Primary Care Settings

## Introduction

Patient safety has been a cornerstone of quality of health care dating back to Hippocrates. The Institute of Medicine (IOM) defines patient safety as "the prevention of harm to patients." Patient safety requires a system of care delivery that (1) pro-actively prevents errors; (2) learns when errors occur; and (3) has a ***culture of safety*** that involves health care professionals, organizations, and patients.[1]

In order to achieve this culture of safety, all components of the system must be aligned, including work processes and organizational policies and procedures; communication and management support for a learning and safety-oriented environment; teamwork and training; and, even employee satisfaction/morale.[2,3] Cognitive (including communication skills) and social/behavioral (including motivation) performance processes can influence patient safety.[4]

In the spring of 2014, based on interest in better understanding safety issues in primary care, the AAAHC Institute conducted a survey of AAAHC accredited primary care organizations. Questions from the patient safety component of this survey were adapted from the *Safety Attitudes Questionnaire* (*SAQ)* developed by J. Bryan Sexton, PhD, at the University of Texas. The Agency for Healthcare Research and Quality (AHRQ) sponsored the development and refinement of the *SAQ* for use in the ambulatory setting.[5]

We also included questions about the perceived benefits and drawbacks associated with the use of electronic health records (EHRs).

Detailed information on the survey results are provided after the summary. Methodology used and demographics of respondents are provided at the end of the report.

## Findings: Summary of responses

**Topics:** Teamwork, Handling of Medical Errors, Communication Openness, Job Satisfaction, and Overall Safety

*Positive Findings*

- 87% of respondents agreed that good collaboration existed among physicians/dentists, nurses, and pharmacists.
- 87% of respondents believed medical errors were handled appropriately.
- 88% reported that it is easy for personnel to ask questions when there is something that they do not understand.
- 88% are proud to work at their organization and 87% believe their organization is a good place to work.

- 90% of respondents liked their jobs.
- 91% of respondents would feel safe being treated at their organizations.
- 92% of respondents reported that they know the proper channel to direct questions regarding patient safety.

*Areas for Improvement*
Communication regarding Medical Errors, Problems with Patient Care, Delays in Delivery of Care, Information affecting Work

- Although 92% of respondents indicated that they know the proper channel to direct questions regarding patient safety and 88% reported that it is easy for personnel to ask questions when there is something that they do not understand, over a quarter (27%) believed it was difficult to discuss errors.
- Almost a quarter (23%) of respondents reported it was difficult to speak up, if they perceived a problem with patient care.
- 22% believed communication breakdowns that lead to delays in delivery of care were common and only 69% reported that they get adequate, timely information about events that might affect their work from management.

Organizations should identify barriers to communicating/reporting and develop plans to overcome these barriers. This may include explicit policies/procedures to increase how and when important information is communicated, managerial support/encouragement for discussing errors, active and respectful listening, diplomacy, etc.[6,7]

**Topic:** Management, Discipline and Training

- 57% of respondents agreed that problem personnel were dealt with constructively by management.
- 68% agreed that their organization did a good job of training new personnel.

These findings indicate that organizations should review their policies/processes to ensure personnel are being adequately trained and problem personnel are dealt with constructively.

**Topic:** Morale

- 59% of respondents believed morale was high in their organizations.

An important component of the culture of safety is how staff perceives overall morale. Morale may be associated with some of the issues described above, including discipline and training issues, as well as employees' difficulties discussing errors and problems, and perceptions about communication breakdowns. Morale has been explicitly associated with reporting of patient safety issues, e.g., if management fails to provide timely feedback to those who report errors or fails to implement corrective action to prevent a reported error from recurring, morale suffers.[8] In addition to addressing these concerns, management may want to consider implementing programs to boost morale, such as acknowledging the value employees provide through staff recognition activities, positive physical environment, employee perks, etc. Patient centeredness—instituting a patient centered healthcare home model—also may be associated with increased staff morale.[9]

**Topic:** Excessive Workload, Fatigue, Work Performance, and Safety

- 54% of respondents acknowledged that when their workload becomes excessive, their performance is impaired.
- 34% of respondents agreed that fatigue impairs their performance in emergency situations.

Responses from questions associated with the work environment indicate a significant lack of acknowledgment of issues associated with excessive workloads and fatigue. The World Health Organization (WHO) has found that heavy and unmanageable workloads are a common concern among health professionals and this contributes to poor performance.[10,11,12] This issue has been the subject of extensive research funded by the Agency for Healthcare Research and Quality (AHRQ).[13] Poor performance, including inability to focus, compromised problem solving, impaired communication, and diminished reaction time, can compromise patient safety and add to low morale (see previous topic).

Organizations should consider ways to raise awareness of the issues associated with excessive workload and fatigue at the managerial and employee level. Prevention of these issues is also important—regular evaluation of workload and fatigue, with appropriate redistribution of workload may be considered.

## Findings on Benefits/Concerns re: Electronic Health Records (EHRs)

96% of respondents indicated that they currently use EHRs. Of those who use EHRs, the following were the top perceived benefits and concerns.

*Benefits*

1. Ease and timeliness of updating patient records.
2. Ease and timeliness of accessing complete patient histories.
3. Increased communication via electronic messaging.
4. Increased security/confidentiality of patient record files.

*Concerns*

1. Inability to exchange health information among different EHR systems.
2. Reduced face-to-face time with patients due to having to enter data during the patient exam.
3. Reliability of EHR system, i.e., the system is slow, does not work or “goes down” frequently.
4. Inability to customize the EHR system.

While the perceived benefits of using EHRs indicated that EHRs improve patient safety by allowing easy access to complete patient histories, increasing communication among providers, and increasing patient confidentiality, there were concerns among health care personnel that different EHR systems cannot “talk” to each other; EHRs are sometimes unreliable; and face-to-face interaction with patients is compromised.

**Safety Attitudes Questionnaire (SAQ)**
**with Additional Questions on Electronic Medical Record (EMR)**

## Detailed Results

| *AAAHC Institute Survey on Patient Safety Culture* | *% Agreed* | *% Disagreed* | *% Neutral* |
|---|---|---|---|
| ***Communication Openness*** | | | |
| *I know the proper channels to direct questions regarding patient safety.* | ***92*** | ***2*** | ***6*** |
| *It is easy for personnel to ask questions when there is something that they do not understand.* | ***88*** | ***5*** | ***7*** |
| *I am encouraged by my colleagues to report any patient safety concerns I may have.* | ***84*** | ***4*** | ***12*** |
| *All the necessary information for diagnostic and therapeutic decisions is routinely available to me.* | ***73*** | ***8*** | ***19*** |
| *Disagreements are resolved appropriately (i.e., not who is right, but what is best for the patient).* | ***71*** | ***15*** | ***14*** |
| *I get adequate, timely information about events that might affect my work from management.* | ***69*** | ***18*** | ***13*** |
| *It is difficult to discuss errors.* | ***27*** | ***61*** | ***12*** |
| *It is difficult to speak up, if I perceive a problem with patient care.* | ***23*** | ***67*** | ***10*** |
| *Communication breakdowns that lead to delays in delivery of care are common.* | ***22*** | ***63*** | ***15*** |
| | | | |
| ***Management/Support for Patient Safety*** | | | |
| *Medical errors are handled appropriately.* | ***87*** | ***5*** | ***8*** |
| *My suggestions about safety would be acted upon if I expressed them to management.* | ***81*** | ***8*** | ***11*** |
| *Management supports my daily efforts.* | ***77*** | ***10*** | ***13*** |
| *Management is doing a good job.* | ***73*** | ***15*** | ***12*** |
| | | | |
| ***Organizational Learning*** | | | |
| *The culture here makes it easy to learn from the errors of others.* | ***70*** | ***11*** | ***19*** |
| | | | |
| ***Staff Feedback/Training/Discipline*** | | | |
| *I receive appropriate feedback about my performance.* | ***80*** | ***9*** | ***11*** |
| *Trainees in my discipline are adequately supervised.* | ***80*** | ***7*** | ***13*** |
| *This organization does a good job of training new personnel.* | ***68*** | ***17*** | ***15*** |
| *Problem personnel are dealt with constructively by our management.* | ***57*** | ***27*** | ***16*** |
| | | | |

**Safety Attitudes Questionnaire (SAQ)**
**with Additional Questions on Electronic Medical Record (EMR)**

| **Teamwork** | **% Agreed** | **% Disagreed** | **% Neutral** |
|---|---|---|---|
| I experience good collaboration with nurses here. | **87** | **6** | **7** |
| I experience good collaboration with physicians/dentists here. | **87** | **5** | **8** |
| I experience good collaboration with pharmacists here. | **87** | **1** | **12** |
| Nurse input is well received. | **84** | **5** | **11** |
| The physicians/dentists and nurses work together as a well-coordinated team. | **84** | **10** | **6** |
| I have the support I need from other personnel to care for patients. | **83** | **7** | **10** |
| | | | |
| **Work Environment** | | | |
| I am less effective at work when fatigued. | **67** | **15** | **18** |
| I am more likely to make errors in tense or hostile situations. | **67** | **20** | **13** |
| When my workload becomes excessive, my performance is impaired. | **54** | **31** | **15** |
| Fatigue impairs my performance during emergency situations (e.g., emergency resuscitation, seizure). | **34** | **41** | **25** |
| | | | |
| **Work Satisfaction** | | | |
| I like my job. | **90** | **4** | **6** |
| I am proud to work here. | **88** | **4** | **8** |
| This is a good place to work. | **87** | **5** | **8** |
| Working here is like being part of a large family. | **80** | **11** | **9** |
| Morale is high here. | **59** | **24** | **17** |
| | | | |
| **Overall Perceptions of Organizational Patient Safety and Quality** | | | |
| I would feel safe being treated here. | **91** | **4** | **5** |
| Management doesn't knowingly compromise patient safety. | **80** | **9** | **11** |

**Safety Attitudes Questionnaire (SAQ)**
**with Additional Questions on Electronic Medical Record (EMR)**

## Electronic Medical Record (EMR) Question Responses

**Do you currently use an Electronic Health Records (EHR) or an Electronic Medical Records (EMR) system at your organization?** 96% =Yes. There were 325 respondents for the following questions.

| Benefit | Percent Checked |
|---|---|
| Ability to more easily submit government-mandated performance data. | 20.1 |
| Ease and timeliness of accessing complete patient histories. | 67.7 |
| Ease and timeliness of updating patient records. | 68.6 |
| Ease of printing follow-up care instructions. | 41.4 |
| Ease, timeliness, and increased accuracy using e-prescribing. | 35.8 |
| Improved coordination and cross-coverage of patient care. | 44.4 |
| Increased communication via electronic messaging. | 50.8 |
| Increased compliance with preventive screening guidelines due to electronic reminders. | 31.2 |
| Increased security/confidentiality of patient record files. | 49.8 |
| Remote access to patient records. | 34.9 |
| Reduction in processing time for payment. | 16.4 |
| Timeliness of lab results. | 42.9 |
| Other, please specify: | 7.4 |
| None of the above | 7.1 |

**Other:**

| |
|---|
| Ability to gather meaningful data |
| CHCS is a pain but we are forced to use |
| Check-in kiosks & templates built |
| Consistency/completeness of documentation due to use of templates (2) |
| Ease of charting, finding information |
| Ease of conducting audits/chart reviews (2) |

| |
|---|
| Efficient use of time (1) |
| Expedites radiology reports to providers. |
| I don’t have to hunt for charts any more. (2) |
| I personally don’t have access to EHR/EMR But as a patient This is how I feel. |
| Information such as labs automatically populate into note which is thoroughly documented when patient is referred to outside provider. |
| Legibility (2) |
| Not applicable to my area (6) |
| Report generation (2) |
| Unsure |
| We have mixed results because our EHR system is outmoded. |
| When the computer works it is great! |

| Concern/Disappointment | Percent Checked |
|---|---|
| Cost of implementing and maintaining the system. | 22.2 |
| Degradation of clinical documentation due to reliance on template generated notes. | 20.3 |
| Difficulty spotting/correcting errors made when entering data. | 23.7 |
| Inability to customize the EHR/EMR system. | 26.8 |
| Inability to exchange health information among different EHR/EMR systems. | 31.7 |
| Lack of customer support. | 13.2 |
| Overdependence on the EHR/EMR system reduces communication/consultation among staff. | 12.3 |
| Reduced face-to-face time with patients due to having to enter data during the patient exam. | 29.2 |
| Reliability of the EHR/EMR system, i.e., the system is slow, does not work or "goes down" frequently. | 27.1 |
| Risk of privacy violations if system is hacked. | 20.6 |
| Time and cost involved in training staff. | 20.6 |
| Use of paper for a complete patient record is still necessary. | 20.9 |
| Other, please specify: | 11.4 |
| None of the above. | 16.9 |

**Other:**

| |
|---|
| CCAPS--need compatibility |
| CHCS is a pain but we are forced to use it. |
| Clinic doesn't operate as efficiently or as fast as paper charts. |
| Concern about alternate system in case of disaster |
| Difficulty locating records |

| |
|---|
| Expectation that we have to enter all the data on a patient when with the patient. Not realistic and takes away from the patient experience. |
| Increased documentation time |
| Lack of on-site Information technology staff to implement and maintain all aspects of electronic records, including equipment (printers, scanners, etc) |
| Limited training/complexity for data mining |
| NA –doesn't apply to me (5) |
| Need ongoing budget for EMR lead. Will require ongoing support from IT and an in-house EMR lead person. |
| Need to continuously change screens |
| No IT support--we are learning as we go with vendor support (difficult to schedule this time). |
| Not user friendly with the lab package |
| Not working properly/connection issues |
| Notes in template frequently lost |
| Software add-ons that were not part of original package and modules that are part of the package that are not ready to be implemented fully |
| Some fields do not populate others when applicable. |
| Still must keep paper documentation even if it is scanned into the EHR. |
| Takes at least 50% more time to complete a given task. Accessing histories, updating records, follow up instructions, getting lab reports, and prescribing are all much slower than in a paper based system. E-prescribing is much more error prone than paper. |
| The amount of time the EHR is off line |
| There are things I wished it could do like have a pop-up as an alert about a patient or when a "future" lab is in the system and the lab cannot easily see it. |
| There is no solid support for our computer system-they frequently crash in the middle of documentation and there is no input or communication from computer support about why and what to expect. |
| Time in building templates. |
| Time it takes to enter information correctly is excessive. 1/2 hour for staff on new pts and 1-2 hours for physicians on new pts |
| Time to use the system |
| Too much early customization has impaired other functions downstream. |
| Unable to fax records; still hard copy; waste a lot of paper daily. |
| Updating patient record is not timely. |
| We need a patient portal. |

## Methodology and Responses

Invitations to participate in this survey were sent via email to 432 AAAHC-accredited primary care organizations' primary contacts. After the initial email, two reminder emails were sent. AAAHC Accreditation Services staff assigned to US Air Force (USAF-64 Medical Groups, 240 satellites) and Coast Guard (USCG-34 sites) transmitted this invitation to primary contacts for these groups. The US Coast Guard contact declined the invitation. All invitations requested that the invited primary contact distribute the link to the online survey to as many of their personnel as possible.

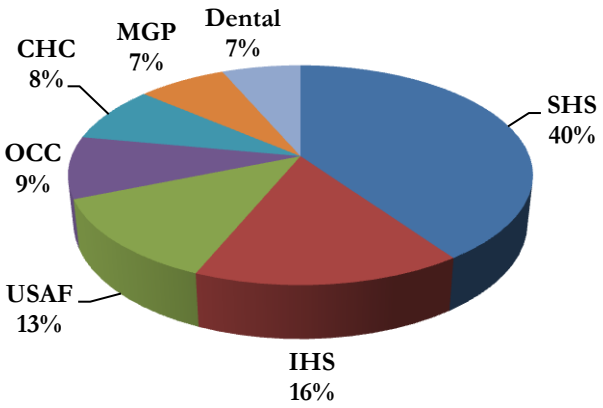
## Primary Care Setting

There were 334 completed responses and an additional 35 responses which included answers to any of the SAQ questions. Responses that came from ENT, gastroenterology, and surgery center groups or for which the setting was not designated as "primary care" were not included in the numbers cited here.

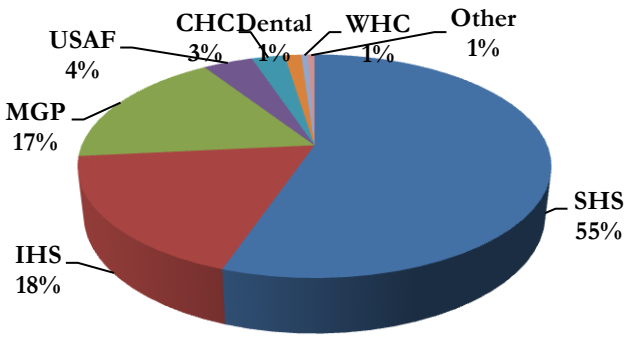
## Respondent Demographics

As stated above, primary contacts were asked to distribute the invitation across their organizations. In order to maintain confidentiality, respondents were not asked to identify their organizations, so it is not possible to know whether multiple responses came from a single organization. The settings of those contacted (496, not including USCG) are displayed on the left side of the chart below. Please compare this with how the respondents classified their settings, on the right side.

**AAAHC setting classifications**




**Self-reported setting classifications**




For the pie charts above: **CHC** = Community Health Center; **Dental** = Dental Office or Group Practice; **IHS** = Indian Health Service; **MGP**= Medical Group Practice; **OCC** = Occupational Health Service; **SHS** = Student Health Service; **USAF** = US Air Force Medical Group; **WHC** = Women's Health Center; **Other**

It appears that certain groups within the AAAHC accredited primary care organization population may be over represented in the response—SHS, IHS, MGP. Others may be under represented: USAF, OCC,

CHC, and Dental. However, recalling that in order to maintain confidentiality, respondents were not asked to identify their organizations, so it is not possible to know whether multiple responses came from a single organization. Therefore it is not possible to be very accurate in understanding whether certain types of organizations were over or under represented in the response to the survey.

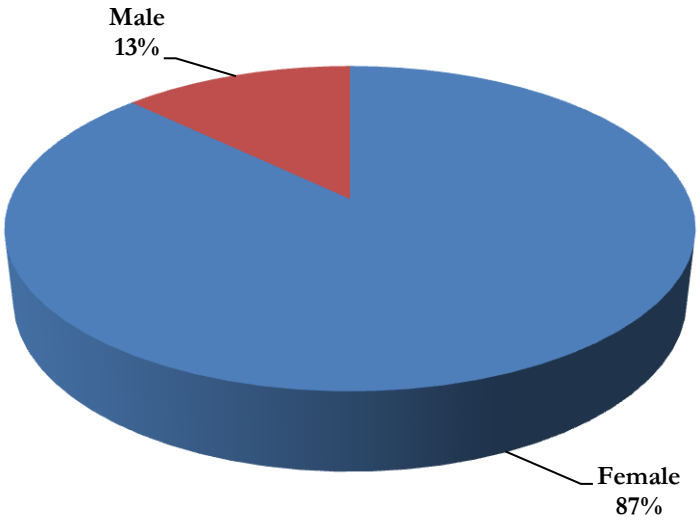
### Respondent's Position at Organization

| Position | Frequency (Percentage) |
|---|---|
| Administrative Support (Clerk/Secretary/Receptionist/Billing) | 15 |
| Registered Nurse | 14 |
| Other Manager (e.g., Clinic Manager) | 11 |
| Clinical Support (CMA, EMT, Nurse Aide, Pharm Tech, Dental Hyg, etc.) | 9 |
| Technologist/Technician (e.g., Surg., Lab, Rad.) | 7 |
| Physician Assistant/Nurse Practitioner | 7 |
| Physician | 6 |
| LPN | 5 |
| Nurse Manager | 4 |
| Other, please specify | 4 |
| Administrative Manager/Director/CEO | 3 |
| Pharmacist | 3 |
| QI | 2 |
| Medical Records | 2 |
| Dentist | 2 |
| Clinical Social Worker | 2 |
| Dietician/Nutritionist | 2 |
| Infection Control/Safety/Compliance | 2 |
| Health Educator | 1 |
| Clinical Support (CMA, EMT, Nurse Aide, Pharm Tech, etc.) | 1 |
| Environmental Support (Housekeeper) | 1 |
| IT | 1 |
| Therapist (RT, PT, OT, Speech) | 1 |

The following (listed in order of frequency) make up almost 70% of respondents:

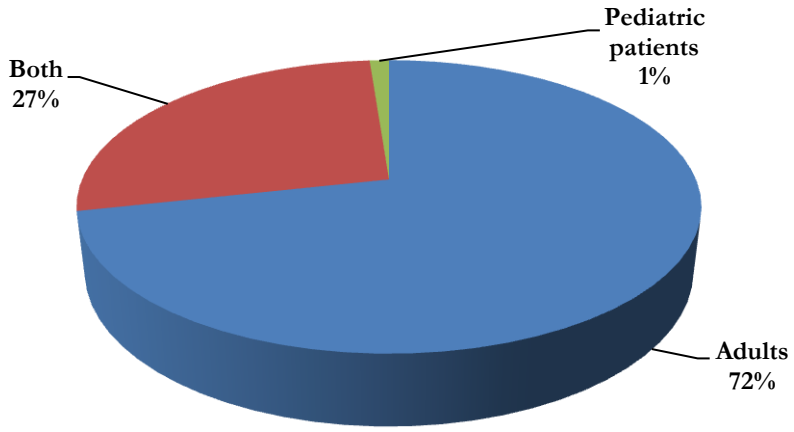
- Administrative Support (Clerk/Secretary/Receptionist/Billing)
- Registered Nurse
- Other Manager (e.g., Clinic Manager)
- Clinical Support (CMA, EMT, Nurse Aide, Pharm Tech, Dental Hyg, etc.)
- Technologist/Technician (e.g., Surg., Lab, Rad.)
- Physician Assistant/Nurse Practitioner
- Physician

## Respondent Gender



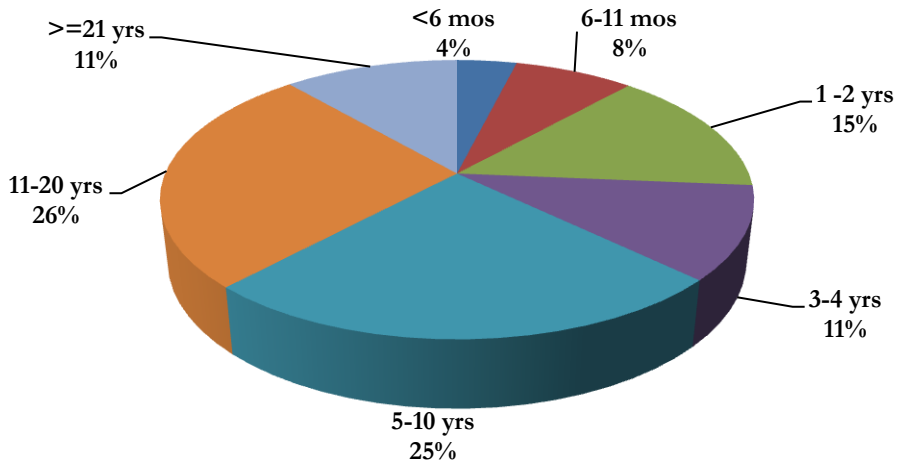

Almost 90% of respondents were female.

## Patient Age Group(s)




Almost 2/3 of respondents work with adults exclusively.

## Respondent Time in Current Position




88% of respondents had worked in their current position 1 year or more.

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