

Modified Stanford Patient Safety Culture Survey Implementation Handbook

May 2006

Prepared for the Study “Patient Safety Culture: Improving measurement and establishing links to patient safety activity”

Funded by the Canadian Patient Safety Institute

If you have questions surrounding the content of this Implementation Handbook, contact:

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CPSI Study Contact List

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1. Identify Senior Leadership for the Project

Identify and secure commitment from the senior leadership person who will champion this project. The Senior leader has 3 responsibilities:

- communicate to all departments and clinical leaders that the organization is participating in the Safety Culture Survey as part of this CPSI Study (so they don't hear about it for the first time from the project flyer that comes out a couple weeks prior to the survey)
- troubleshoot wrt any implementation issues that arise during the survey preparation and implementation phases
- Approve and co-sign survey covering letters along with the University Principal investigators and project flyer

2. Ethics Approval

This study has been approved by York University's Human Participants Review Committee. A copy of the approval letter is attached in Appendix A. You will need to check whether this is sufficient for your organization or whether the project needs to be submitted to your local REB. For most of you this process is already well underway.

3. Identify and Communicate with all Relevant Administrative Departments

As you read through this implementation handbook it will become clear that you will need the support of the Quality / Safety / Risk Management departments, the appropriate personnel in the human resources department or whichever department will be working with you to create the staff list that is required for the project (as described in section 4), perhaps the person in charge of privacy, and others. You will need to carefully identify all of the relevant individuals and outline an approach for obtaining their support.

4. Staff Groups Targeted by the MSI

We are currently analyzing a large dataset collected within the last year using the MSI. There are several components to these analyses, one of which includes assessing the appropriateness of the MSI, or sub-sections of the instrument, for staff in various roles and various settings. Preliminary analyses should be completed by the end of June at which time we may revise the list of staff groups and settings we are suggesting you survey. With that in mind, at this stage we are continuing to recommend that organizations use the MSI with all staff groups except for staff in support roles in administrative departments (e.g accounting and billing clerks, secretarial staff in non-direct care areas such as human resources, finance, purchasing, etc). This groups is excluded because they do not encounter any patient care issues in their job which means that the vast majority of the survey questions are not appropriate for this group.

Accordingly, you will be identifying and surveying the following groups of staff in all sectors (acute, long term care, community and out-patient settings, pre-hospital care, etc):

1. Staff in all clinical roles (physicians, nurses, RPN/LPNs, allied Health Professionals – broadly defined, technicians in clinical areas such radiology, clinical educators)
2. Other staff in direct care roles or with direct patient contact (e.g health care aides, mental health workers, patient porters, dietary aides, unit clerks, clinic staff)
3. Staff in departments servicing direct care (e.g. lab, housekeeping, sterilization room)
4. Staff in support services departments such as maintenance and other trades that may work in patient care areas or service patient equipment
5. Managers and coordinators in clinical areas (patient care managers, clinical directors, etc.)
6. Clinical and managerial staff in pre-hospital care (EMS)

You can survey the organization's senior leaders, though this is a very small respondent group and their data tend to be heavily skewed.

All full-time and part-time staff should be included. Very casual staff, working only a couple of shifts a month can be included or excluded at your discretion (or in consultation with the research team if you wish). But please note that this group tends to have a lower response rate so if casual staff are being included in the sample group, status (full-time, part-time, or casual) should be included as a variable in the sample file (see section 4.2 below).

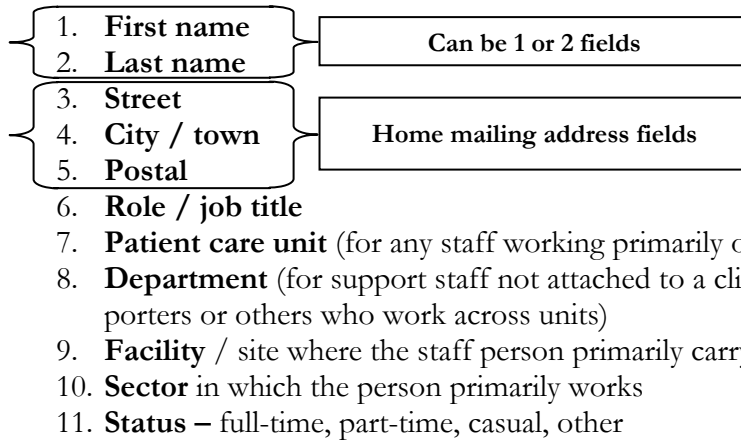
4.1 Surveying All Staff Rather than a Sample

One of the primary goals of this study is to further knowledge about the MSI tool, including its ability to detect change over time and its ability to help identify units or organizations that are high performing in the area of safety culture so these groups can act as case studies of innovative practice in this area. In addition, there is a large body of literature documenting the presence of sub-cultures within healthcare organizations—these sub-cultures are not only professionally based, but may also be unit based / based on the clinical micro-system. Accordingly, as we continue to investigate the properties of the MSI it is important that the research team and the decision making partner organizations are able to potentially identify and understand various sub-cultures that may exist (and differ) in different patient care units / areas of an organization. To do this a minimum of 30 respondents is required for any area of an organization we wish to study. With response rates around 50% this means we need to sample at least 60 staff members per patient care unit (or other grouping we wish to report on). This, coupled with the fact that organizations may wish to give all staff for whom the survey is relevant an opportunity to comment on the culture of the organization in the area of patient safety, suggests it is most appropriate to use a census (eg all staff in eligible roles outlined above) rather than a random sample.

4.2 Administrative Data needed for each staff member Targeted by the Survey

In order to be able to report on the strength of the safety culture in different areas of the organization, in different sectors, and for different staff groups, organizations need to prepare clean data about each these for the data collection and analyses processes.

Organizations need to prepare an excel file with the following information for each staff member who will receive a survey. In this file, a separate field for each of the following 10 pieces of information must be included:



Because we rely on administrative databases which are not created or maintained in a manner consistent with the levels of accuracy and completeness that are required for scientifically sound research studies, we find that this information we require is not always readily available, nor is it typically complete or up-to-date. Accordingly, you will need to work closely with the person responsible for the department that is producing the database to assess and verify the data's accuracy completeness (e.g. beware of duplicate names, people on long-term leave etc.). You will also want to make sure you allow several weeks to get this list as it is likely you will have to ask that the list be run more than once since it rarely contains everything you need the first time around.

5. General Data Collection Procedures

When it comes to data collection and data entry processes it is necessary to balance three important and delicate areas: (1) ethical requirements for research with human participants according to the Tri-Council policy, (2) privacy legislation in force in various jurisdictions, and (3) the integrity of the research process. Given the requirements in each of these areas, we worked with the following constraints as we identified the data collection and entry procedures:

1. Decision making partners cannot be responsible for both the sending out of questionnaires AND also have questionnaires returned to their organization as this violates the ethical requirement that a subject's decision to participate in the research be both voluntary and not known to the organization in which s/he works.
2. Decision makers may feel that due to privacy legislation, they cannot share staff lists with the members of the research team or any third party outside the organization which means that decision making partners will need to be responsible for obtaining

- staff mailing lists and coordinating survey mailings from within the organization (with guidance from the research team)
3. The manner in which data are collected must be consistent across all organizations participating in the study in order to ensure the integrity of the research.

The first 2 constraints above mean that your organization will mail out questionnaires and questionnaires will be returned to the Institute for Social Research (ISR) at York University.

The following additional procedures will ensure sufficient consistency in data collection approaches across all organizations participating in the study (thereby meeting constraint 3 above).

- ❖ Surveys will be mailed to staff member's homes as stand alone mailings (e.g surveys cannot be included with pay stubs or other mailings). Previous work suggests stronger response rates are achieved when surveys of this nature with a broad sample of staff are mailed to staff members' homes as stand alone mailings. In addition, most of the staff targeted by the survey do not have secure mailboxes on site in their organization where mail is regularly retrieved.
- ❖ A standardized survey cover letter that has received ethics approval from York University's REB and that meets your organization's Ethics requirements will accompany each survey. The letter will appear on Joint letterhead (York and Your organization) And will be signed by a member of the research team and a senior leader in the DM organization
- ❖ The research team will supply the cover letter and the final survey and each DM organization is responsible for printing these documents
- ❖ The research team will provide Business Reply return envelopes to be included with each survey that is mailed out. Staff will use these envelopes to return their questionnaires directly to the Institute for Social Research at York University where data entry and verification will be carried out.
- ❖ Each survey will go out with a unique identifier printed or written on the survey. This ID number is not meaningful on its own. Once the data are entered at York, the research team will link the data with the sample file from your organization, stripped of the name field. This linking of files is done to allow us to carry out analysis by the various stakeholder and area sub-groups.
- ❖ Organizations will be responsible for sending out reminder cards and a second full questionnaire mailing to all staff identified for participation in the survey at intervals agreed upon with the research team.

5.1 Privacy Issues. Given sensitivity around recent privacy legislation, great care was taken to ensure that the data collection procedures that organizations will follow (as outlined above) are NOT in conflict with any privacy legislation. This was achieved by devising a set of procedures that do not require any staff names to be released to anyone outside of your organization (certainly, however, there are no ethical issues that prevent staff lists from being shared with members of the research team).

6. Communicating with Staff – Pre-Notification

Pre-notification strategies such as flyers and posters which inform staff that a safety culture survey is being undertaken with staff in the organization have been shown to help increase response rates. We recommend that a flyer be sent out in with pay stubs approximately 1-2 weeks prior to date that surveys will be mailed out. In Appendix B we have attached a template with text that is appropriate for the flyer. Any changes to this text must be discussed with the research team to ensure they do not violate ethics requirements.

Be aware that it can take a few weeks to get approval for the flyer from the senior leader whose name will appear on it and to get the flyer printed and into the pay stub mailing you are aiming for. Be sure to send the flyers to all staff groups outlined in section 4. Organizations should also print a few larger poster-sized flyers that can be hung in a prominent place in each site of the organization. Finally, it is important to ensure that Physicians and others who may not receive pay stubs from the organization are targeted for pre-notification using a strategy that will reach that group.

7. Detailed Questionnaire Package Preparation and Mailing Steps

7.1 Staff Skills Required. The preparation and mailing of the safety culture questionnaires is a detailed process that requires someone with familiarity with mail merges (using an excel database) to be closely involved in the process.

7.2 Starting Point – The Final Excel Database. You need to ensure that the excel database you obtained with the fields outlined in section 4.2 is clean and ready for mail merging. As you arranged to have all the information in section 4.2 captured in the database, you may have realized that you required more than one field for some things like role (call these role & Role_2), depending on the info you are given. You may also need multiple fields for address (e.g street, PO Box, town, city, province, postal, etc). You will need to play with this a bit so that you can generate a nicely laid out address for mailing using the labels merge.

7.3 Creating ID numbers in the Database. You will need to create ID numbers for each person in the database. An extra column will be added to the excel list once the list is finalized. You will need to discuss with Liane Ginsburg the ID number you will start with as we need to ensure that each organization in the study uses a unique set of numbers. Once you have a start number (e.g. IWK1001) you will then give everyone in the database a number by creating an ID field and moving down the excel list with consecutive numbers (e.g. IWK1001, IWK1002, IWK1003).

7.4 Supplies. You will need to prepare the following documents and supplies in advance and make sure all are at your disposal prior to preparing the survey packages.

- Electronic version of final, signed cover letter
- Electronic version of final Safety Culture Questionnaires (in 2 documents, 1 for each page—you will see why in the next section)

- Out-going envelopes on your organization's letterhead for sending surveys out. Ideal size will allow you to fold the letter and questionnaire in half, not thirds as you also need to have room for the business reply envelope to fit in (# req'd = 2x sample size)
- Mailing labels for outgoing envelopes & reminder cards (# req'd = 3x sample size)
- Business Reply envelopes (# req'd = 2x sample size – YORK will provide these for you)

7.5 Preparing Letters, questionnaires, and labels for mailing

- 7.5.1. **The database.** Sorted the final excel sheet by ID number and BE VERY CAREFUL sorting in excel that you have selected the whole sheet and are not just sorting some of the columns. Once the sheet is sorted double check that the information for a few people remains correct to ensure your sort worked properly (eg find someone you know and make sure the correct job category and address is on the row for that person)
- 7.5.2. **The cover letter.** Prepare the cover letter by separating the document into 2 and inserting and verifying layout of merge fields as follows:
- Separate the Final survey cover letter into two documents, one for page 1 and one for page 2. Page 1 will be the merge document and page 2, which is generic, can be photocopied onto the back of the merged page 1s. Be sure to leave several extra lines at the end of page 1 so that when the address fields are inserted in the next step none of the letter text is pushed onto another page.
 - Using mail merge procedures, link the page 1 document to the excel database and insert the merge fields into the letter so that it is personalized with the person's name and full mailing address at the top, their name in the salutation line, and their id number in the ID box on the bottom right corner of page 1 (It is very helpful to have the ID number on everything when stuffing envelopes).
 - Verify that addresses look OK visually once page 1 of the letter is merged
 - Verify that all of the information on page 1 is still on one page (people with extra address lines may push the text onto a second page which needs to be avoided because of the next step.
 - Print the merged page 1s and then photocopy the second page of the letter, which is generic, onto the back of the merged, printed letters.
- 7.5.3. **The Questionnaire.** You CANNOT simply photocopy all of the questionnaires unless you are prepared to hand write the ID number on each questionnaire or use a number stamper that automatically advances one number as you stamp. Given the large volume of surveys it will likely be preferable to use the same approach as in 6.5.2:
- Using the page 1 of the questionnaire document, link it to the excel database and insert the ID field in the ID box on the bottom right corner

of the questionnaire. Make sure the text box is long enough to accommodate the entire ID number

- (b) Merge and print that first page then photocopy the back page of the questionnaire, which is generic, onto the other side of the 1st page. You may wish to print 2 copies of the questionnaire for each staff member and retain the second set for use in the follow-up mailing (see section 8.2).

7.5.4. **Outgoing labels.** You will also need to use mail merge to create labels for the outgoing envelopes.

- (a) Create your labels document to fit the labels you have and copy the mailing fields from the top of the cover letter into the labels merge document.
- (b) insert the ID field on the bottom right corner of the label (as with the letter, it is best to have this ID number appear on everything to facilitate correct stuffing of envelopes)
- (c) link this label file to the excel database so you can use merge to make the labels
- (d) Check that addresses look OK visually once they are merged
- (e) Print 3 copies of the labels (you will use the 2nd copy for the reminder cards that will go out to everyone 2 weeks after the first mailing and the 3rd set will be used for the follow up mailing)
- (f) Stick your first set of printed Labels on the outgoing envelopes

7.6 Stuffing envelopes

- ❖ Based on the steps above, the letter, questionnaire and labeled outgoing envelope piles should be in the same numeric order (note that the letters and questionnaires may be in reverse order depending on how your photocopier is set up).
- ❖ Each envelope should have the cover letter on top of the questionnaire with the business reply envelope on the very top.
- ❖ As you stuff, it is critical that you verify that the same ID appears on the bottom of the letter, the questionnaire and on the label of the outgoing envelope.

8. Reminder Cards and Follow-Up Mailing

8.1 Reminder Cards. In an effort to strengthen survey response rates, we use a modified Dillman approach to survey data collection. This means that two weeks after the first questionnaire is mailed out a short reminder card is sent to all staff who were sent a survey. The reminder card thanks those who may have already returned a completed survey and encourages others to return their completed questionnaire as soon as possible. Text that can be used for reminder cards is included in Appendix C.

The text of the reminder card can be printed 3 times onto a letter size sheet of light coloured card stock. Cut the cards into 3 and attach the 2nd set of address labels you

printed onto the other side and mail it like a postcard. Since you will be sending out a large number of reminder cards, you may wish to have a printer run these off and cut them for you and then you can simply stick on the mailing labels.

8.2 Second Mailing. Typically, two to four weeks following the time that reminder cards are sent out, a second full survey mailing is sent to all non-respondents. Because of fact that the research team cannot notify the decision maker organization which ID numbered surveys have been returned the 2nd survey mailing will be sent to all staff. The cover letter that accompanies the 2nd survey will clearly explain at the beginning why those who may have already returned a completed questionnaire are receiving another one and these individuals will be instructed to disregard the mailing.

The second mailing is done using the identical procedures as those outlined for the first mailing in section 7.5 (note that you will not need to duplicate step 7.5.4 as you will have already printed the mailing labels (or step 7.5.3 if you printed 2 sets of questionnaires the first time around).

We will guide you as to the timing that this second mailing should go out based on the flow and slowdown of questionnaires that are being returned to us at York but it will probably be about 3 weeks following the mailing of the reminder cards. Note that given the volume of work associated with preparing these mailings see section XX), it may be best to prepare the reminder cards and the 2nd mailing immediately after the first one has gone out. Then simply put them in the mail on the appropriate date. This will allow you to hire additional support for one concentrated block of time. It will also allow you to capitalize in terms of speed and proficiency (eg whoever does the mailing will be much faster and more efficient the 2nd time around, particularly if this is done closely following the first mailing).

9. Staff time on the Project & Project Costs

Last year one province implemented the survey with a staff group of approximately 6000 people. They estimated the amount of resources that were consumed by the project to help plan for future similar survey initiatives. There are a number of similarities between this province's experience and your own that make their estimates of time and resources spent on the project useful for your organization's own planning. For a sample size of just under 6000, their approximate cash costs were \$8200 for things like paper, envelopes, photocopying, stamps, teleconference, and business reply return postage costs. It is important to recognize that the bulk of these are mailing costs (mail out and business reply postage costs). Recall that the Business Reply postage costs will be initially incurred by York and then your organization will be billed for those surveys that are returned.

In addition to these cash costs, it is estimated that you will require the equivalent of 3-5 weeks of staff time on the project (1-2 weeks planning & navigating –steps 1-4&6 above) and 2-3 weeks of a clerical staff person's time on the mailings and their preparation—steps 7-8 above). **NOTE:** as indicated above, the clerical person who undertakes this role must be proficient with mail merges using an Excel database.

10. Timeline & Duties

Task (relevant section number in handbook is identified in brackets)	Who is Responsible	Date by which to be completed
Identify Senior Leadership for the Project (1)	DM contact	Now
Submit ethics application (if required) (2)	DM contact & York	Now
Communication (1&3) - Identify and communicate with all administrative depts involved in the process (quality, HR, etc) - Inform all dept. and clinical leaders the organization is participating in the Safety Culture Survey as part of this CPSI Study (this is separate from pre-notification of all staff)	DM contact & DM Senior leader	Month of June
Meet with head of dept that will produce staff list for survey database / mailing (4)	DM contact (in-conjunction with relevant local dept.)	June 26 th
Obtain initial run of staff list from appropriate department (4)	DM contact (with relevant dept.)	July 14 th
Schedule and arrange which pay mailing in which pre-notification flyer will be sent out (6)	DM contact	July 14 th
Obtain senior leader approval for pre-notification flyer in Appendix B with his/her name on it (6)	DM contact	July 28 th
Business Reply envelopes to be used in survey mailings sent to DM Organizations (used in 7)	York	July 28 th
Final electronic version of survey cover letter and questionnaire sent to DM Organizations (used in 7)	York	July 28 th
Obtain final staff list from appropriate department (4)	DM contact (with relevant dept.)	July 28 th
Obtain senior leader approval (and electronic signature) on Final survey cover letter (used in 7)	DM contact	August 18 th
Detailed Questionnaire Package Preparation and Mailing Steps (7)	DM contact (with clerical support)	August 18 th to September 8 th
Target Survey mail-out date		September 12 th
Reminder cards go out to staff (8)		2 weeks following actual 1 st mail-out date
Second mailing goes out to staff (8)		Discuss with Research team
Track all surveys that are returned to sender as undeliverable	DM contact (with support from mail room)	Throughout the data collection process
Forward staff list (stripped of name fields) to York Researchers	DM contact	September 8 th
Forward list of undeliverable ID numbers to York researchers		November 15 th

Appendices

Separate attachments are included

Appendix A - Ethics approval letter is attached in

Appendix B - Pre-Notification flyer text

Appendix C - Reminder card text