The Resilient Health Care Network (RHCN)

www.resilienthealthcare.net

Reflections on initial survey results

(21 November 2011)

In order for the participants in the RHCN to get an idea of who they are and what they want, a Survey Monkey questionnaire was sent to everyone who were on the list at the time.

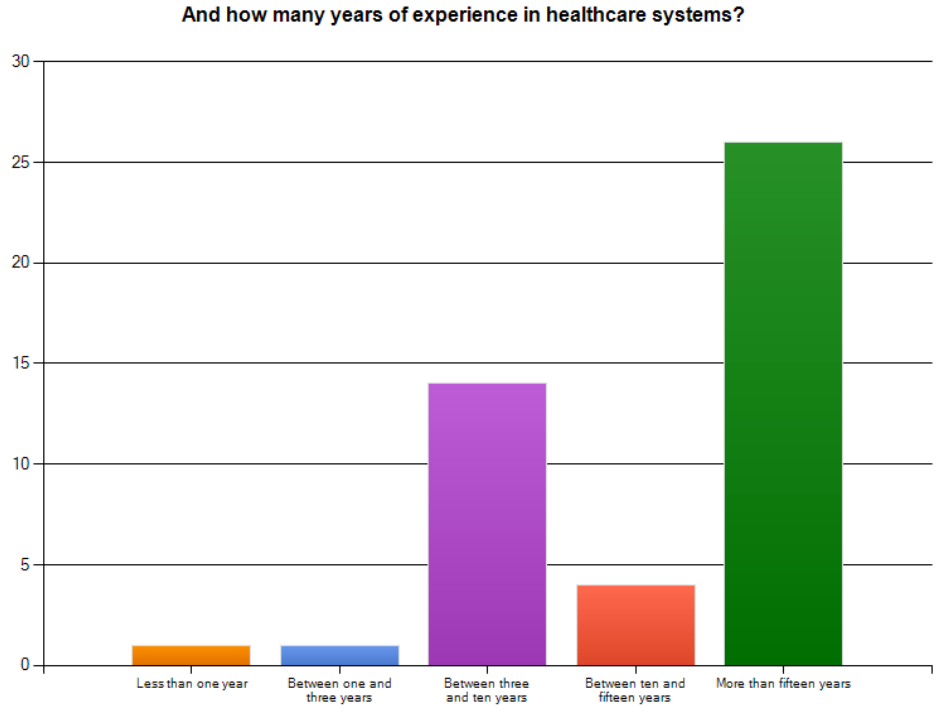
The questionnaire included a variety of requests in the form of 12 questions, which received a total of 47 responses. Some respondents did not answer all questions. Some questions were open-ended, inviting written responses and those varied from 12 to 44 responses.

This little note summarises the answers for most of the questions. It is followed by a number of appendixes which contain the answers to the open-ended questions.

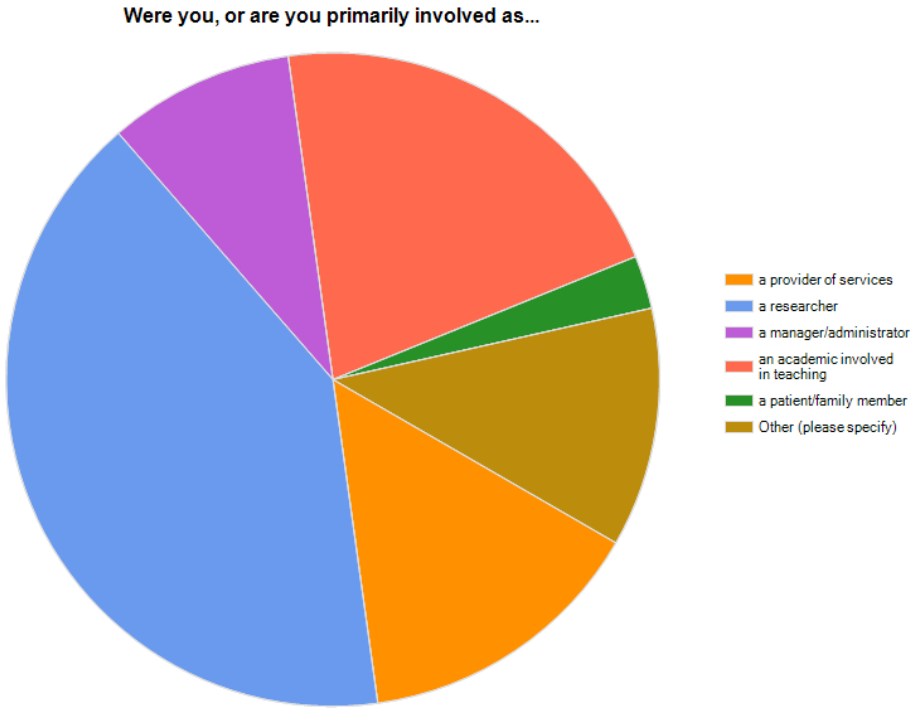
We encourage you to take a little time to read this note and to reflect on the information it provides. The next step is really up to you! The answers can give you an idea both about what the RHCN can do and how it can go about it. But something will only be done if you make an active contribution! Your fellow participants therefore look forward to hear from you. The Core Group will be happy to help whenever and wherever it is possible, but don't expect them to take the initiative on everything.

Who are the participants – who are we?

All 47 respondents have worked in healthcare at some point, with 95% having spent three years or more in the field. More than half have been involved in healthcare for more than 15 years.



Asked about their type of involvement, with the answers not being constrained to just one type, 77.5% described themselves as researchers and 40% as academics involved in teaching.



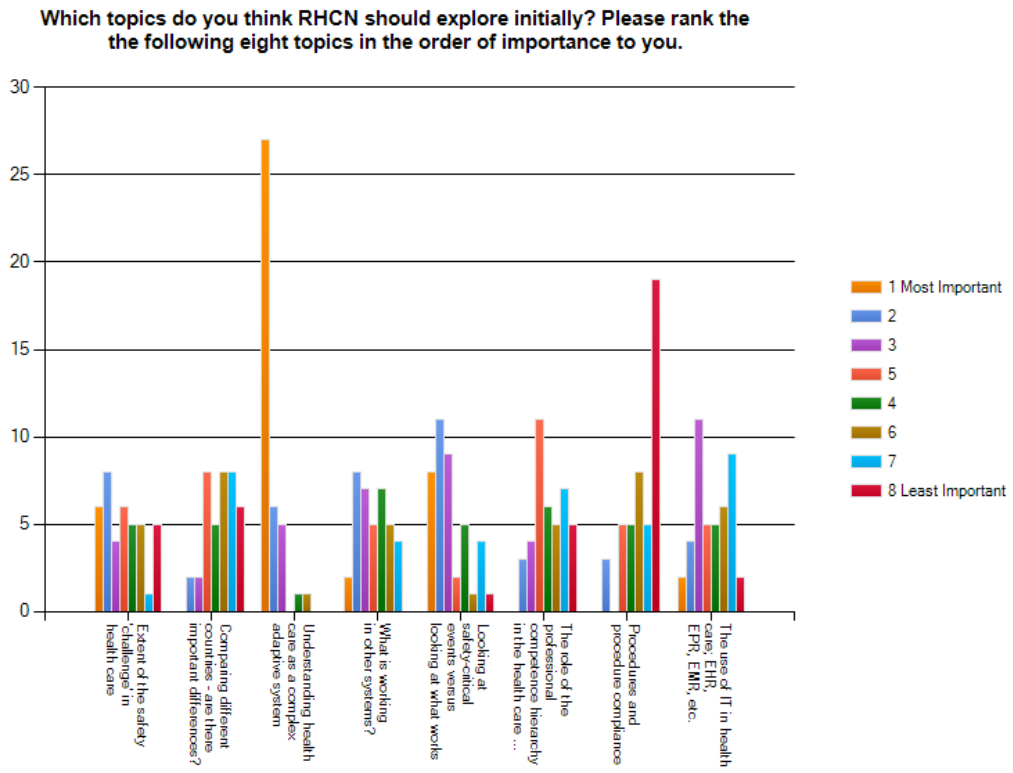
What topics are of interest to the participants?

Question 6 asked the respondents to rank eight options for topics to be explored by RHCN and also invited participants to suggest other topics. There was a fairly clear demarcation in the responses.

- The most commonly selected option was Understanding Healthcare as a complex adaptive system. Looking only at first choices 27/40 respondents selected this. Including second and third choices as well, the topic was selected by 38/40 respondents.
- The second most common choice was Looking at safety-critical events versus looking at "what works"**.** This was selected (as first, second and third choices) by 28/41 respondents.

Three options (between-country patient safety comparisons, the role of professional competence hierarchies in safety, and the importance of procedures and procedural compliance) received no first choices and very few second or third choices, which suggest they should not be short-term priorities.

The distribution of answers for all the questions is shown below.

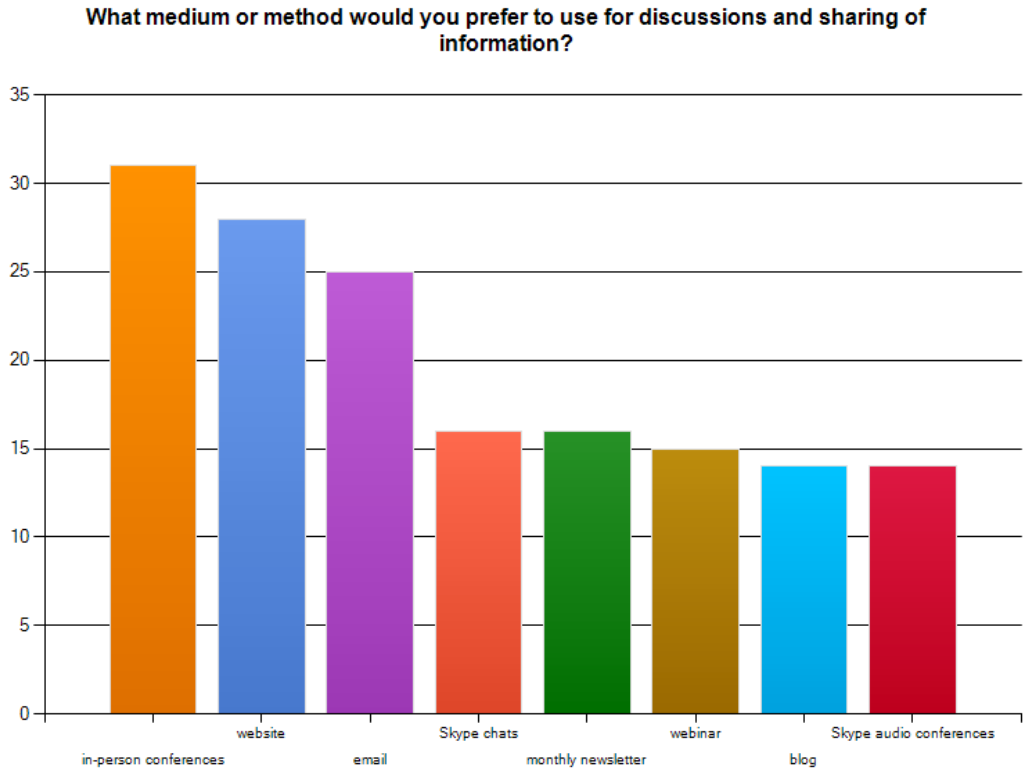


The written responses included in the appendix indicate a variety of views on topics to be explored. Two mentioned the importance of discussions of research methodologies and two mentioned communication issues. Several included interesting philosophical reflections.

How do participants want to communicate?

Question 7 looked at how the RHCN participants would prefer to communicate. The most commonly selected option (31/47) was in-person conferences although almost as many (28/47) selected communication through a website and a slightly smaller group (25/47) indicated their preference for communication through email.

The twelve written responses to question 7 are attached and also include an eclectic menu of options, including one participant who is clearly anaphylactic on the topic of monthly newsletters.



How do participants see RHCN developing?

Question 8 was entirely open-ended and 34 written responses were received. The theme which seems to run through most of them involves starting slowly and carefully – in other words “don’t bite off more than we can chew”. Another fairly common theme dealt with facilitating the exchange of information about different projects and research efforts in various locales with a view to sharing information and developing useful collaborations.

What are participants willing to contribute to RHCN?

Question 9 offered several options to participants and more than one option could be selected. There was a high level of willingness to assist, which is very encouraging news. Almost all participants (42/45) indicated a willingness to collaborate on a project and more than half (24/45) were interested in facilitating an exchange visit.

Is there interest in a symposium on resilience in healthcare?

Participants indicated a strong interest in a possible first international symposium on resilience in healthcare in Denmark. The vast majority (45/46) indicated an interest in attending although 20 respondents were concerned that vicissitudes of funding and travel restrictions might prevent them from traveling to Denmark.

How involved are participants at the present time in research or innovative projects?

Question 11 invited participants to provide details of projects or initiatives in the quality, safety, or resilience aspects of healthcare and **44 respondents provided a veritable cornucopia of examples**, which bodes well for the future development of the RHCN. The written responses are attached.

Acknowledgement

The survey came about thanks to the efforts of Elaine Pelletier and Rob Robson. It is thus in itself a good example of how the RHCN can work. We truly hope that many of you will be inspired by this and carry on in the same spirit.

Göran Henriks
Erik Hollnagel
Jan Klein
Anne Sophie Nyssen
Rob Robson
Charles Vincent
Bob Wears

Written responses to question 6 – “Other areas we should explore”

1. Appropriate research approach/methodology for development of the knowledge-base for design of resilient systems in health care. The broader role of information processes (monitoring, analysis & feedback) in creating resilient systems (beyond introduction of specific IT applications).

2. I do not like the wording of item 6 "the role of professional competence hierarchy". I would prefer something like : "the role of professionals with various competences at different hierarchical levels". Because there are competences at all levels of the hierarchy.

3. Methods and tools for safety work in health care Legal and economical "framework" and the influence on the safety work

4. ETTO is invisible in healthcare, where policy and regulations create more ETTO every day.

5. Much as we say we are about health care and then focus on illness care or the absence of health, discussions on patient safety actually focus on the absence of safety for patients. Exploring this first and clarifying what we mean by patient safety seems important to me.

6. The relation between safety and quality.

7. Board level leadership of safety

8. I think we need to explore areas of convergence, divergence and potential synergy between different perspectives on CAS thinking (eg. socio-technical versus socio-ecological views of health care systems). This includes understanding associated implications for QI approaches, research design, and knowledge translation in health care.

9. Looking at the relative structures and cultures of organizations - e.g., their network and cultural properties.

10. Basic communication between & amongst HC provider - resilience lens , active participant /anticipatory questions

11. I am interested in a few topics: individual resilience and the interface with safety and quality of work environments; conflict engagement across professional groups; the role of coaching in improving safety and integrating behavior change; how can improvisation training support adaptive responses

12. Capture, preservation and sharing of expert knowledge and reasoning.

13. Effectiveness of health care in disaster situations. This factor is discussed extensively in the reports on the London Bombings of 2005.

14. exploring difference in the conception of safety between frontline staff and the governance level, Board and senior executives

15. The critical events vs. what works dichotomy study is a huge area with many possible avenues. I put this at the top because it goes to the crux of organizational discontinuity in safety;

16. Some of these headings are not clear to me. Does one include the science of change management and understanding the barriers and facilitators, for executives as well as MDs to learn about Quality, Safety and Risk?

17. Continuity across distributed health service delivery

18. Communication

Q7 written responses (12) to question “Are there other media or methods [for communication within RHCN] to explore?

1. Internet Forum

2. There will be no one venue for everything you plan. A website and a discussion board are excellent repositories of insight and prior work. Posts to such message boards can be rich in data. Email threads become lost over time. Email is a terrific way to broadcast data. Skype and in-person are the venues for real conversations.

3. I think all can and should be used. I also think they fit various needs and venues and using all available resources makes sense to me so there is a fit with intent.

4. I like F2F but am willing to learn any new method - I do now have a Skype address although I have only used it once!

5. For me, at least one in -person meeting would be useful to determine the most likely areas for research collaborations. Once collaborations are underway, I think that a website, webinars, emails and other forms of virtual communication can work well if the parties have a focused project to work on and the commitment and resources to do the work.

6. Perhaps a Ning group site or similar format where each person can contribute info and we can respond to others and also post resources. Here is an example from our Ning site: http://ehccocommunity.ning.com

7. listserv- of course similar to email.

8. Don't have a strong preference, any of the above would be ok, though a face to face meeting once a year or every other year would be very helpful

9. NO MONTHLY NEWSLETTER! Having this would be a mark of failure. We need an organization that is parsimonious rather than verbose.

10. Depending on number of participants and frequency. LinkedIn group maybe. Have anybody used Acrobat Connect Pro?

11. The challenge to understand this science would benefit from face to face meetings.

12. I like a mix of synchronous presentations and discussions, with asynchronous 'flavour of the day' discussions via chat or email though my email box tends to overload.

Written responses (34) to question 8: “How can RHCN be best developed?”

1. Initially, development of focused research and policy questions followed by in-depth review of literature and creation of comprehensive bibliography might help provide a broad base of education for group and a shared understanding of gaps and needs.

2. Put together a research team to go after funding for a specific project - funding always seems to help build momentum and get people working as a team.

3. Not sure at this point. We just have to get started!

4. Initial activity might focus upon defining the sub-aims and framework for RHCN activity. Perhaps smaller working groups could then focus upon specific areas to conduct scoping reviews and prepare briefing/concept papers which are then presented, discussed and integrated through larger meetings. Critical from an academic viewpoint is that the RHCN supports its members to secure local resources to pursue research linked to the RHCN aims.

5. short run: connect researchers across the world long run: facilitate cooperation, knowledge exchange and initiation of cross boarder research projects

6. Establishing a review of active research teams and topics Linking with existing relevant structures : scientific, professional, politics...

7. By discussions and information flow between the people involved. No big plans, but gradual development.....

8. By developing group efforts in research and spread.

9. Will think about it - sorry, have no useful ideas at present

10. Short: Areas of focus, who's who, opportunities for collaboration. Long: Evidence base, theory development, practice community

11. Facilitate communication on relevant issues

12. I don't know. Useful insight is highly valuable, but very difficult to generate, and often not understood in the health care world. Publications in the peer reviewed medical literature are essential, as no one in medicine knows how to find or use anything from the human factors literature.

13. Networks of conversation; white papers shared with home country stakeholders; publishing, collaborative multinational research projects

14. Getting participants involved, both to define activities/topics and to run them.

15. a F2F or an online conference to work out the strategy for the short term would be helpful

16. Conference to present current projects Set up international collaborative research project

17. At least one in-person meeting and a few small projects in the short run. In the long run a certificate program of specialization in RHC.

18. See previous answer

19. It will depend on the commitment of members and the capacity of someone to champion it and be a catalyst for its momentum

20. Somehow make a convincing argument of this approaches value to the Canadian HC system

21. Short term- create relationships among the members; establish an initial scope; establish some group agreements for how we want to work together; share resources so that we novices (novi?) can share the language and thoughts of those who have done more work in the area of study Long term- develop using a community of practice model a la Etienne Wenger; integrate novice- expert as part of the community; disseminate what emerges to a

broader healthcare community

22. Can't really say at this time.

23. In short run -exchange of ideas and development of projects, data. In the long run, dissemination of qualitative and quantitative data/information, studies.

24. Develop a scorecard for the effectiveness of health care in disaster situations.

25. Need to see how the theoretical base of resilience actually plays out in specific healthcare activities. I think this could contribute to both theoretical and empirical development.

26. Short run, meetings, long run newsletters and electronic communications

27. (1). In the short term, efforts should be directed at putting the RHCN and the question of resilience on the agenda by writing one or two articles for healthcare journals (not simply medical journals). (2). In the long run, RHCN should try to establish links with other groups that are exploring the concept of resilience in other settings (for instance the ecological movement).

28. Short run: do something novel, do anything well. Long run: exhaust the topic and go out of business.

29. The first step is to get to learn each other which is best done in person The meeting in Copenhagen could be a good opportunity. The next step could be common research projects in different areas.

30. Start with a face to face, establish some clear short and long term goals and maintain the efforts with opportunities to communicate.

31. It seems others up to this point have solutions but no understanding. RHCN can take an impassioned yet objective approach to develop new thinking related to HC resilience. Success in this should drive the rest of it.

32. In the short term I think its important to develop relationships and to establish the tone and scope of the network's interests - so perhaps this means informal discussion groups - to shake out important topics. This could be a spring board for webinars so more organized chat sessions to smaller conferences with lots of discussion.

33. Pooling of knowledge through website, meetings. Development of position papers. Discussion / presentation of national projects. In the longer term seeking external funding as a network and though joint collaborations.

34. Slowly organically and focused on practical questions

Q11 written responses (44!!) to invitation to describe project(s) you are involved with in Q/PS/RE field:

1. Study to evaluate the impact of leadership training and team member familiarity on team processes and performance.

2. Not projects really, its integrated in my ´daily duties Reducing HAI Promoting safety culture

3. Colleagues of mine are involved in the project Op-Design. The aim of the project is to improve work environment, effectiveness and patient safety at an operating theatre in Hälsingborg. A PhD student is working on drug handling - how to make it safer. I am also involved in system safety in aviation and process industry with minor elements of resilience.

4. The health region has recently engaged John Black and associates and the Global Production System including pull systems. Mistake proofing has become the recent lingo with the QI team.

5. Measuring patient safety in health care (mixed methods review and empirical case studies at both organisational and microsystems levels) Development of quality monitoring and feedback systems to support continuous improvement in care (in anaesthetics and nursing care) Analysis of the effects of a large scale patient safety improvement programme (including measurement of safety climate and capability) - recently finished.

6. Through our research group, I am involved in projects looking to manage infection risk in hospitals, epidemiologic study of surgical claims data from the UK, and healthcare risk management.

7. In healthcare: - Collaborative workflow tools in radiotherapy - Designing for participation in ambulatory medicine systems - Patient participation in radiotherapy safety In other areas - Trade-off decisions in risky decision making (airline operation management) - The reasoned use of procedures in maintenance (railway operations) - Performance management and the design of enabling organizations (large public administrations or companies) - Margins of maneuver as a condition for quality in collective performance (industrial production) - The conditions for rapid collective learning (forest fire management)

8. After retiring from KTH, School of Technology and health, I am continuing by doing consulting work, at the Patient Safety department. (Research, education etc....)

9. I've been leading and involved in local QI projects regarding the following: 1. Reliable delivery of "best practices" in the ICU 2. Hospital management of patients with severe infections 3. Redesign of General Internal Medicine service 4. Handoffs

10. Project on predicting impact of new health information technology on clinical work patterns, professional healthcare priorities, and patient outcomes (quality improvement, but including safety and resilience ideas).

11. 1. Evaluating whether availability of test results pushed out to clinicians' mobile devices (smart phones, mini-tablets) reduces work load and likelihood of adverse and enhances team situation awareness. 2. Assessing the adoption and effects of protocols for patient handovers 3. Looking at complex interface between municipalities health services, GPs and hospitals (handovers, medication, hospitalization etc.) 4. Various forms of tele-medicine / welfare technologies

12. Emergency department

13. Most of our current and anticipated grant work is centered on the topic of resilience (workshops, partner funding projects)

14. I'm working in a patient safety unit and work with different project such as e-learning, hospital acquired infection, walk arounds, patient safety dialogues. Different analysis such as risk analysis, global trigger tool, root cause analysis, pharmaceuticals.

15. We have 5 years experience in incident learning in radiation treatment with sufficient data to extend the work to include resilience engineering.

16. Supervising Eleanor Murray - who is also in network so best she describes her work

17. I have done a study on Positive Predictive Value for alarms as a way to diminish alarm fatigue. We have been unable to get this study published, and there are no resources for work on a larger, more appropriate scale. I have also done a study on predicting cardiac arrest in in-patients. We have also struggled to get these results published, and also to garner the resources to do this study on a larger scale. I have also collaborated with Richard Cook on several studies, and been a member of the CTL since its inception.

18. I am a sole proprietor of a consulting company and provide services focused on conflict engagement as an essential component of creating cultures of safety. I also am part of a network of persons who do this work. We incorporate resilience as a factor in conflict engagement in health care.

19. We are preparing a Masters degree in the are area of quality in healthcare.

20. The Research Initiative for Quality and Safety in Healthcare (Denmark)

21. Patient safety as a competitive advantage (Safety Asset) national project funded by the Finnish Technology Fund. The aim of the project is to develop methods and services to the healthcare sector that would improve patient safety in a systematic manner. VTT acts as a coordinator of the project.

22. Lead developer on a new masters degree in Health Care Quality, Risk and Safety

23. Writing papers resulting from PhD studies on resilience in NHS hospitals in the face of competing demands of finance, productivity, staff workload and patient safety - adapted and developed Rasmussen (1997) safe working envelope. Just started a project looking to improve reliability of a healthcare system (hospital and community) at weekends and holidays.

24. I am providing qualitative analysis of Rob/Sam/Karen's TRACES project on critical incident investigation training. I am also in the early stages of conducting analysis of critical incident data collected over five years that involves some form of 'transition' through the healthcare system. Once broad themes are identified it is hoped that areas will be identified in which to use FRAM for prospective analysis - assuming I am still working at this current position.

25. My background includes practice, teaching, management, consulting, and research, with clinical experience in emergency, burn, rural, and women's health. I teach health care ethics and organizational ethics, consulting in health care, professional trends and issues, research, health policy, and health care leadership. Our research teams adapt knowledge and methods from health care and the field of ecological restoration (the study and repair of damaged ecosystems) to research safety and quality with students, clinical practitioners, managers and educators in acute care, continuing care, and the community. I work with undergraduate and graduate students, post doctoral fellows, and colleagues who want to develop knowledge, research, and teaching skills in the areas of health care ethics, organizational ethics, safety and quality, health care leadership, adaptive health systems management, and/or fostering health systems change. I have research partnerships in several Canadian provinces and with colleagues and students in Brazil at the Universidade de São Paulo College of Nursing in Ribeirão Preto (USP-RP), Universidade Federal de

Santa Catarina (UFSC) in Florianopolis, and Universidade Rio Grande de Sul.

26. Multiple projects on: Patient safety Quality of care Service accreditation Medication use Health care networks and communities of practice

27. Resilience communication b/n HC providers @ change of shift Resilience lens (new view) to health system safety analyses Cognitive task analysis of high risk processes (PICC catheters/Cardiac angiography)

28. I am involved as a consultant- I am currently working with an OR/PACU at a Children's Hospital to improve collaborative practice and address unprofessional conduct. There have been recent sentinel events and there is a great deal of conflict among the staff/ managers including a nurses' strike.

29. Using natural language processing methods to capture clinical care notes and grab whatever an be grabbed that machines can work with, to build a very large cancer information/knowledge/data base.

30. We are looking at communication and technical work in the ICU as well as peri-operative medication reconciliation.

31. Currently working on AHRQ (US-federally funded) project using critical decision method interviews and simulation to evaluate he development of and role of expertise in relation to the recognition and management of sepsis.

32. I teach a course in Resilience Architecting at USC and have written a textbook on the subject. The focus is on understanding the principles that enable resilience.

33. Working on safety / resilience in IT systems Resilient performance in the ER Social analysis of the evolution of the patient safety movement over the past 40 years

34. Working with Bob Wears, Terry Fairbanks, et al., on projects related to improving resilient behaviors in understanding medical events, roles of HIT, etc.

35. In the beginning of the last year of a 4 years project to train healthcare staff in the "new view", we collaborate with WorkSafe BC on their safety agenda, have worked with Health Authorities in western Canada, working with US Canadian consortium on issues related to public reporting of healthcare acquired infections

36. Too numerous to count.

37. I am involved in research on reporting systems in Swedish health care and the evaluation of intervention with the aim to improve safety culture in an organization

38. I am executing a qualitative formative evaluation of a new model of care for rural veterans with HIV leveraging local clinic collaboration with a centralized specialist team and tele-health technology. This is a quality improvement pilot program funded through the VA. I am also part of a team conducting another formative evaluation of a tele-ICU program, and there are emerging themes that may synch nicely with system safety.

39. I am the Medical Lead for a new Masters in Science Program in Quality, Safety and Risk, a Master Facilitator for the Patient Safety Education Project with the Can.Patient Safety Institute, and a member of a group of physicians in the Province of Ontario who meet regularly to discuss safety.

40. Military command and control. Airport security screening. Healthcare clinician cognitive aid development. Maritime decision aid development.

41. Working with Bob Wears to develop a wiki regarding safety issues surrounding EMRs.

42. Most of what I do involves these issues: 1) need for two nurses to independent double check high risk medications, despite a computerized order entry and barcode administration system... 2) role of Charge nurses in managing peak workload during admissions,

discharges and transfers as two examples

43. All of the projects I am involved in deal with these aspects. See the web link for details: http://www2.warwick.ac.uk/fac/med/staff/sujan/research/

44. Studying ED triage as translation between narrative and technical rationality.