Detecting and rescuing deteriorating patients:

Survey user guide

1. General

- It is very likely **you will need input from other colleagues to answer some questions,** therefore we strongly encourage you to **quickly skim the survey so you can identify who you need to contact** and get a head start on seeking their input. We've listed some contact suggestions for specific questions in Section 5 of this guide.

- The information collected will be used for research purposes only. We need to temporarily identify Trusts and hospitals in order to match this survey information with information from the National Cardiac Arrest Audit. **No hospital or individual will be publicly identified in any output.**

- Your name and contact details are required so that we can get in touch if we need to clarify responses to questions.

- There may be questions you expected we would touch on but haven't. This doesn't mean we view those topics as unimportant, simply that we had to ensure the survey wasn't too burdensome for very busy staff to complete.

2. Using the survey

- To navigate between pages you can use the 'Next' and 'Back' buttons at the bottom of each page. This allows you to see the next set of questions and to change your answers at any point until you click 'SUBMIT' on the final page, when your responses will be sent to us.

- **Avoid using your web browser's own navigation buttons as entered data may be lost**.

- The 'Exit Survey' button allows you to exit the survey at any time and saves all of your answers except those on the current page. **To pick up where you left off you need to use the original link sent to you by email AND use the same computer** you started the survey on. This means **you cannot forward the link to a colleague to complete one question**, you will need to be the one to enter all survey data.

3. Definitions

Track and trigger system:

Track and trigger systems involve checking a patient's observations and the triggering of a response based on those observations- some examples are early warning scores, modified early warning scores and the national early warning score.

Rapid response team:

A rapid response team is one called to respond to an acutely unwell, deteriorating patient. Some examples include Medical Emergency Teams (MET), Critical Care Outreach Teams (CCOT) and Patient At Risk Teams (PART). Teams which respond ONLY to cardiac arrests should not be entered.

Quarters:

Quarters are defined by the calendar year. Q1=January-March Q2= April-June Q3=July-September Q4=October-December

4. Example answers

The 2 questions which capture changes over time from 2009 to present (Q2 and Q14) are the most complex to complete. We recommend you identify individuals who were around during this time

period to assist in completing these questions. We have also provided example answers to help you. Your answer may be far simpler than the versions here- they are just to demonstrate a range of possible scenarios.

Question: Track and trigger system over time

We are interested in changes over time in the track and trigger systems used in your hospital from 2009 to present. We appreciate it is difficult to be precise with historical answers, but please consult others as needed and just be as accurate as you can.

Please complete the table below, highlighting the start and end date of different systems you have used in this period.

There are multiple drop-down boxes because we would also like you to note the start and end dates of periods of significant variation in COVERAGE (the number of adult general wards using the system) and COMPLIANCE.

For the purpose of this question, COMPLIANCE requires two elements: full and accurate completion of the chart AND escalation of patients in line with local policy:

- **>90%** of charts are completed in full and accurately *AND* patients are escalated in line with local policy
- **75-90%** of charts are completed in full and accurately *AND* patients are escalated in line with local policy
- **<75%** of charts are completed in full and accurately *AND* patients are escalated in line with local policy
- **UNKNOWN** No assessment of compliance possible

Quarters refer to calendar years, with Q1 starting in January

EXAMPLE ANSWER:

The example of Hospital X

- Until August 2009, Hospital X had no track and trigger system in place.

- They then introduced their own locally developed paper track and trigger system which had >90% compliance from the outset but in terms of coverage was initially only rolled out to a third of all wards. In February 2010 the system was extended to all adult general wards.

- However in January 2013 they shifted to using a paper copy of the National Early Warning Score with some modifications from the original version created by the Royal College of Physicians. This was rolled out to all wards but compliance was initially 60%.

- By August 2013 an awareness campaign had driven compliance up to 85%.

- In September 2014 it was decided to move to VitalPac instead, an electronic early warning score system based on the parameters of the National Early Warning Score. This was rolled out to all wards, but whilst the observations were all being entered and added accurately, due to problems with appropriate escalation initial compliance was 80%.

- From May 2015 escalation in line with policy improved, and the system continues to be in use with >90% compliance.

System	Coverage of adult general wards	Compliance	Start date	End date
NONE			Prior to 2009	'09: Quarter 3
Paper: Other	Less than 50%	>90%	'09: Quarter 3	'10: Quarter 1
Paper: Other	All wards	>90%	'10: Quarter 1	'13: Quarter 1
Paper: Locally modified NEWS	All wards	<75%	'13: Quarter 1	'13: Quarter 3
Paper: Locally modified NEWS	All wards	75-90%	'13: Quarter 3	'14: Quarter 3
Electronic: Based on NEWS (Specify below)	All wards	75-90%	'14: Quarter 3	'15: Quarter 2
Electronic: Based on NEWS (Specify below)	All wards	>90%	'15: Quarter 2	Currently in use

If you used an electronic system, please state the name of the system used in that year (e.g. 2015: VitalPac)

2014 VitalPac

Question: Rapid response team over time

14. We are interested in changes over time in the hours and membership of the rapid response teams used in your hospital from 2009 to present. We appreciate it is difficult to be precise with historical answers, but please consult others as needed and just be as accurate as you can.

There are 4 options for the 'hours of operation' which cover all the potential hours of operation for a response team - all 4 options should be entered into the table at least once. For each of the 4 options please enter the start and end date for covering these hours and the team membership closest to yours during this time period.

If a time slot has not been covered by a rapid response team from 2009-present, please select 'NEVER' as the start date and team membership. If the same hours of operation were covered but by a different team make-up please enter that information in a separate row.

Quarters refer to calendar years, with Q1 starting in January.

EXAMPLE ANSWER:

- For Monday- Friday days, Hospital X previously had a Patient at Risk Team (PART), which was staffed by both doctors and nurses from 2008 until September 2014.

- In October 2014 PART was replaced with two separate teams- a Critical Care Outreach Team (CCOT) staffed by nurses and a Medical Emergency team (MET) staffed by doctors.

- Monday-Friday days from October 2014- present, have been covered by both the MET and the CCOT.

- Monday-Friday nights were covered just by the CCOT during this time.

- Weekend days began being covered only by the CCOT from April 2015 until present.

- Weekend nights have never been covered by any rapid response team.

	Hours of operation	Team membership	Start date	End date
.	Monday- Friday days	Doctors and nurses	Prior to 2009	'14: Quarter 3
.	Monday- Friday days	Nurses only	2014: Quarter 4	Currently in use
.	Monday- Friday days	Doctors only	2014: Quarter 4	Currently in use
.	Monday - Friday nights	Nurses only	2014: Quarter 4	Currently in use
.	Weekend days	Nurses only	'15: Quarter 2	Currently in use
.	Weekend nights	NEVER	NEVER	

5. Suggested contacts

Question: Medical registrar bed coverage

Approximately how many beds is EACH on-call medical registrar currently responsible for covering:

- In hours (08:00-20:00 Mon-Fri)
- Out of hours (Week nights 20:00-08:00, weekends and public holidays)

We appreciate this will be a best estimate and recommend you contact one of the medical registrars directly to answer this question. Alternative points of contact could be the associate medical director, site manager or clinical audit team.

Question: Agency staffing

Over the last 12 months on the general wards, approximately what PERCENTAGE of the following were staffed by agency or locum staff:

- Registered nurses
- Doctors

We appreciate this will be a best estimate and may be based on your experiences of the wards in your hospital. Alternatively we recommend you contact your finance department, site manager or work force planning department.

6. Contact us

We are here to support you in completing the survey - if you have any questions at all please don't hesitate to contact us.

In addition, if in Question 4 you opt to send us a copy of your track and trigger chart/electronic chart specification rather than answer Qs 5-12, please use one of the following:

Email: deteriorate@lshtm.ac.uk

Mail: Dr Catherine Carver, Dept of Health Services Research and Policy, LSHTM, 15-17 Tavistock Place, London, WC1H 9SH

Tel: 020 7958 8288

Fax: 020 7927 2701