

## Supplementary Appendix

This appendix has been provided by the authors to give readers additional information about their work.

Supplement to: Landrigan CP, Rothschild JM, Cronin JW, et al. Effect of reducing interns' work hours on serious medical errors in intensive care units. *N Engl J Med* 2004;351:1838-48.

Figure A (Online only)

<b>ICU SIGNOUT</b>	
<b>Patient</b>	_____
<b>To Do List</b>	
1.	
2.	
3.	
<b>Critical issues/ unstable situations</b>	
1.	
2.	
3.	
<b>Active medical problems</b>	
1. Resp-	Ventilator settings, ABGs, goals
2. CV-	Hemodynamic status/ PAC data
3. Neuro-	
4. Renal-Lytes-Endo-	
5. GI-Nutrition-	
6. Heme-	
7. ID, other-	
8. Code status-	
9. Family issues/contacts-	
<b>Notes</b>	

**Supplemental Table A (for the electronic version of the manuscript only): Error Subtypes**

**a) Serious Intern Medication Error Subtypes\***

	Number of Errors on Traditional Schedule (Rate/1000 Patient-Days)	Number of Errors on Intervention Schedule (Rate/1000 Patient-Days)
<b>Serious Intern Medication Errors — Total</b>	<b>129 (99.7)</b>	<b>75 (82.5)</b>
Wrong medication	10 (7.7)	11 (12.1)
Wrong dose	44 (34.0)	29 (31.9)
Wrong route	6 (4.6)	2 (2.2)
Wrong frequency	4 (3.1)	2 (2.2)
Wrong rate	5 (3.9)	0 (0)
Drug-drug interaction	2 (1.5)	0 (0)
Omitted medication	10 (7.7)	4 (4.4)
Failure to discontinue medication	14 (10.8)	5 (5.5)
Duplicate order	13 (10.0)	8 (8.8)
Wrong patient	8 (6.2)	5 (5.5)
Not otherwise classified	13 (10.0)	9 (9.9)

\* primary subtype reported only; mutually exclusive categories

**b) Serious Intern Procedural, Diagnostic, and Other Error Subtypes\***

	Number of Errors on Traditional Schedule (Rate/1000 Patient-Days)	Number of Errors on Intervention Schedule (Rate/1000 Patient-Days)
<b>Serious Procedural Errors</b>	<b>11 (8.5)</b>	<b>6 (6.6)</b>
Failure to take precautions or follow protocol to prevent accidental injury	3 (2.3)	4 (4.4)
Injury due to technical error	0 (0)	2 (2.2)
Injury due to failure to adequately assess patient before procedure	2 (1.5)	0 (0)
Preventable self-extubation / central line removal by patient	0 (0)	1 (1.1)
Failure to order needed procedure or follow-up test	0 (0)	0 (0)
Failure to take precautions to prevent injury	1 (0.8)	1 (1.1)
Inadequate training or supervision	2 (1.5)	0 (0)
Inadequate reporting or communication	1 (0.8)	0 (0)
Avoidable treatment delays	1 (0.8)	1 (1.1)
Wrong side prepared for procedure	1 (0.8)	0 (0)
Failure to check equipment	1 (0.8)	1 (1.1)
Other procedural errors	2 (1.5)	0 (0)

<b>Serious Diagnostic Errors</b>	<b>24 (18.6)</b>	<b>3 (3.3)</b>
Errors in history taking or physical examination	11 (8.5)	1 (1.1)
Avoidable delay in diagnosis due to delayed examination	2 (1.5)	1 (1.1)
Incomplete history or physical exam, leading to misdiagnosis	5 (3.9)	0 (0)
Misinterpretation of physical exam findings	2 (1.5)	0 (0)
Other error in performance of history or physical	2 (1.5)	0 (0)
Avoidable delay in ordering diagnostic test	2 (1.5)	0 (0)
Failure to act on test results	4 (3.1)	1 (1.1)
Wrong diagnostic test ordered	1 (0.8)	0 (0)
Misinterpretation of test results	0 (0)	1 (1.1)
Test ordered / interpreted for wrong patient	1 (0.8)	0 (0)
Other diagnostic errors	5 (3.9)	0 (0)
<b>Other Serious Errors</b>	<b>12 (9.3)</b>	<b>7 (7.7)</b>
Failure to take precautions	3 (2.3)	0 (0)
Inadequate reporting / communication	2 (1.5)	2 (2.2)
Other	7 (5.4)	5 (5.5)

\* primary subtype reported only; mutually exclusive categories

c) **All Serious Medication Error Subtypes\***

	Number of Errors on Traditional Schedule (Rate/1000 Patient-Days)	Number of Errors on Intervention Schedule (Rate/1000 Patient-Days)
<b>Serious Medication Errors – Total</b>	<b>175 (135.2)</b>	<b>105 (115.5)</b>
Wrong medication	15 (11.6)	14 (15.4)
Wrong dose	67 (51.8)	39 (42.9)
Wrong route	8 (6.2)	3 (3.3)
Wrong frequency	6 (4.6)	4 (4.4)
Wrong rate	6 (4.6)	0 (0)
Drug-drug interaction	3 (2.3)	0 (0)
Omitted medication	11 (8.5)	6 (6.6)
Failure to discontinue medication	14 (10.8)	8 (8.8)
Duplicate order	18 (13.9)	11 (12.1)
Wrong patient	9 (7.0)	6 (6.6)
Not otherwise classified	18 (13.9)	14 (15.4)

\* primary subtype reported only; mutually exclusive categories

**d) All Procedural, Diagnostic, and Other Error Subtypes\***

	Number of Errors on Traditional Schedule (Rate/1000 Patient-Days)	Number of Errors on Intervention Schedule (Rate/1000 Patient-Days)
<b>Serious Procedural Errors</b>	<b>18 (13.9)</b>	<b>11 (12.1)</b>
Failure to take precautions or follow protocol to prevent accidental injury	6 (4.6)	7 (7.7)
Injury due to technical error	0 (0)	3 (3.3)
Injury due to failure to adequately assess patient before procedure	2 (1.5)	0 (0)
Preventable self-extubation / central line removal by patient	0 (0)	2 (2.2)
Failure to order needed procedure or follow-up test	2 (1.5)	0 (0)
Failure to take precautions to prevent injury	2 (1.5)	2 (2.2)
Inadequate training or supervision	3 (2.3)	0 (0)
Inadequate reporting or communication	1 (0.8)	0 (0)
Avoidable treatment delays	1 (0.8)	1 (1.1)
Wrong side prepared for procedure	1 (0.8)	0 (0)
Failure to check equipment	1 (0.8)	2 (2.2)
Other procedural errors	5 (3.9)	1 (1.1)

<b>Serious Diagnostic Errors</b>	<b>28 (21.6)</b>	<b>10 (11.0)</b>
Errors in history taking or physical examination	11 (8.5)	3 (3.3)
Avoidable delay in diagnosis due to delayed examination	2 (1.5)	2 (2.2)
Incomplete history or physical exam, leading to misdiagnosis	5 (3.9)	0 (0)
Misinterpretation of physical exam findings	2 (1.5)	1 (1.1)
Other error in performance of history or physical	2 (1.5)	0 (0)
Avoidable delay in ordering diagnostic test	4 (3.1)	1 (1.1)
Failure to act on test results	4 (3.1)	2 (2.2)
Wrong diagnostic test ordered	1 (0.8)	0 (0)
Misinterpretation of test results	1 (0.8)	1 (1.1)
Test ordered / interpreted for wrong patient	2 (1.5)	0 (0)
Other diagnostic errors	5 (3.9)	3 (3.3)
<b>Other Serious Errors</b>	<b>29 (22.4)</b>	<b>18 (19.8)</b>
Failure to take precautions	11 (8.5)	3 (3.3)
Inadequate reporting / communication	5 (3.9)	3 (3.3)
Other	13 (10.0)	12 (13.2)

\* primary subtype reported only; mutually exclusive categories