

A Simplified Definition for Personal Protective Equipment Donning and Doffing Compliance to Facilitate Hospital-Wide Auditing and Reporting

Lisa Wong, Noori Kim, Lauren Cooper, Andrea Morillo, Liz McCreight and Jennie Johnstone

Mount Sinai Hospital
Joseph & Wolf Lebovic
Health Complex

Hennick Bridgepoint
Hospital

Lunenfeld-Tanenbaum
Research Institute


Circle of Care

Background and Issue

Our setting: An acute care teaching hospital in Toronto, Ontario during the first year of the COVID-19 pandemic, when multiple updates to the personal protective equipment (PPE) selection and guidance documents were issued.

The question from hospital leadership: Are staff donning and doffing PPE effectively?

2




Most PPE audit tools are not ideal for larger-scale reporting

Observation to be monitored	Compliance (%)
101. Goggles are worn at all times when required	
102. Goggles are worn at all times when required	
103. Goggles are worn at all times when required	
104. Goggles are worn at all times when required	
105. Goggles are worn at all times when required	
106. Goggles are worn at all times when required	
107. Goggles are worn at all times when required	
108. Goggles are worn at all times when required	
109. Goggles are worn at all times when required	
110. Goggles are worn at all times when required	
111. Goggles are worn at all times when required	
112. Goggles are worn at all times when required	
113. Goggles are worn at all times when required	
114. Goggles are worn at all times when required	
115. Goggles are worn at all times when required	
116. Goggles are worn at all times when required	
117. Goggles are worn at all times when required	
118. Goggles are worn at all times when required	
119. Goggles are worn at all times when required	
120. Goggles are worn at all times when required	
121. Goggles are worn at all times when required	
122. Goggles are worn at all times when required	
123. Goggles are worn at all times when required	
124. Goggles are worn at all times when required	
125. Goggles are worn at all times when required	
126. Goggles are worn at all times when required	
127. Goggles are worn at all times when required	
128. Goggles are worn at all times when required	
129. Goggles are worn at all times when required	
130. Goggles are worn at all times when required	
131. Goggles are worn at all times when required	
132. Goggles are worn at all times when required	
133. Goggles are worn at all times when required	
134. Goggles are worn at all times when required	
135. Goggles are worn at all times when required	
136. Goggles are worn at all times when required	
137. Goggles are worn at all times when required	
138. Goggles are worn at all times when required	
139. Goggles are worn at all times when required	
140. Goggles are worn at all times when required	
141. Goggles are worn at all times when required	
142. Goggles are worn at all times when required	
143. Goggles are worn at all times when required	
144. Goggles are worn at all times when required	
145. Goggles are worn at all times when required	
146. Goggles are worn at all times when required	
147. Goggles are worn at all times when required	
148. Goggles are worn at all times when required	
149. Goggles are worn at all times when required	
150. Goggles are worn at all times when required	
151. Goggles are worn at all times when required	
152. Goggles are worn at all times when required	
153. Goggles are worn at all times when required	
154. Goggles are worn at all times when required	
155. Goggles are worn at all times when required	
156. Goggles are worn at all times when required	
157. Goggles are worn at all times when required	
158. Goggles are worn at all times when required	
159. Goggles are worn at all times when required	
160. Goggles are worn at all times when required	
161. Goggles are worn at all times when required	
162. Goggles are worn at all times when required	
163. Goggles are worn at all times when required	
164. Goggles are worn at all times when required	
165. Goggles are worn at all times when required	
166. Goggles are worn at all times when required	
167. Goggles are worn at all times when required	
168. Goggles are worn at all times when required	
169. Goggles are worn at all times when required	
170. Goggles are worn at all times when required	
171. Goggles are worn at all times when required	
172. Goggles are worn at all times when required	
173. Goggles are worn at all times when required	
174. Goggles are worn at all times when required	
175. Goggles are worn at all times when required	
176. Goggles are worn at all times when required	
177. Goggles are worn at all times when required	
178. Goggles are worn at all times when required	
179. Goggles are worn at all times when required	
180. Goggles are worn at all times when required	
181. Goggles are worn at all times when required	
182. Goggles are worn at all times when required	
183. Goggles are worn at all times when required	
184. Goggles are worn at all times when required	
185. Goggles are worn at all times when required	
186. Goggles are worn at all times when required	
187. Goggles are worn at all times when required	
188. Goggles are worn at all times when required	
189. Goggles are worn at all times when required	
190. Goggles are worn at all times when required	
191. Goggles are worn at all times when required	
192. Goggles are worn at all times when required	
193. Goggles are worn at all times when required	
194. Goggles are worn at all times when required	
195. Goggles are worn at all times when required	
196. Goggles are worn at all times when required	
197. Goggles are worn at all times when required	
198. Goggles are worn at all times when required	
199. Goggles are worn at all times when required	
200. Goggles are worn at all times when required	

- Long lists of elements to be monitored
- % Compliance = Number of elements observed ÷ Total number of elements monitored
- Collective output when multiple audits are conducted is difficult to interpret and action

3



1

Simplified definitions for PPE donning and doffing compliance

Donning Compliance = Performing hand hygiene prior to donning PPE, and donning the required PPE

Doffing Compliance = Doffing PPE in the correct order, including hand hygiene, and in an appropriate location

4



Our redesigned PPE audit tool

% Compliance = Number of compliant donning or doffing events out of the total number of events observed

5



Results and lessons learned

- 16 PPE audit sessions conducted across our medicine and surgical units using redesigned audit tool: 70% donning compliance and 69% doffing compliance
- Hand hygiene, use of face shields, and doffing order were identified as areas requiring further support and education
- Feedback from auditors: Tool is intuitive to use, and the compact layout allows for multiple healthcare workers to be audited simultaneously
- Simplifying the definition of compliance was necessary to facilitate unit-level reporting, and to return an audit result that was actionable.

6