

**Multimedia Appendix 2.** Type of portal access and proxy authorship for any proxy users on behalf of patients with type 2 diabetes over the entire cohort study period, from 2006-2015 (N=3,782)

	No (%)
<b>Type of proxy use</b>	
Registered proxy use	197 (5.2)
Informal or “hidden” proxy use	3,585 (94.8)
<b>Percent of all patient messages (2006 – 2015) authored by any proxy</b>	
(continuous %) of secure messages by any proxy	27% ± 30% (range 0.4-100%)
<50% of secure messages by any proxy	3,007 (79.5)
≥50% of secure messages by any proxy	775 (20.5)