**Supplementary 1.**Diagnostic and Procedural ICD-9-CM Codes Used

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| **Description** | **ICD-9-CM Code** |
| ***Diagnostic Codes*** |  |
| Achalasia | 530.0 |
| Pneumonia | 481, 482.0-482.4, 482.8-482.9, 483, 484, 485,  486, 507.0, 482.40, 482.41. 482.42, 482.49 |
| Sepsis | 998.0, 995.9, 995.90, 995.91, 995.92, 038 |
| Esophageal Perforation | 862.22, 862.32 |
| Dehydration | 276.51 |
| Malnutrition | 262, 263 |
| ***Procedural Codes*** |  |
| Esophageal Dilation | 42.92 |
| Heller Myotomy | 42.7 |
| Esophagectomy | 42.4, 42.41, 42.42, 42.5, 42.51-59, 42.6, 42.61-69 |