

**Supplementary Table 2. Leading primary diagnosis for digestive diseases in South Korea in 2020**

| Rank | Diagnosis <sup>a)</sup>                                | ICD-10 code            | Total patients (n) | Inpatients (n) | Outpatients (n) | ER patients (n) | Hospital visit days | Medical expenses <sup>b)</sup> | Per capita cost <sup>c)</sup> |
|------|--------------------------------------------------------|------------------------|--------------------|----------------|-----------------|-----------------|---------------------|--------------------------------|-------------------------------|
| 1    | GERD <sup>d)</sup>                                     | K21, R12               | 4,872,947          | 25,299         | 4,860,997       | 13,850          | 11,038,499          | 534,410.1                      | 109.7                         |
| 2    | Gastritis/duodenitis                                   | K29                    | 4,728,749          | 34,749         | 4,708,449       | 91,848          | 8,727,598           | 336,357.1                      | 71.1                          |
| 3    | Intestinal infectious disease                          | A00–09                 | 4,055,908          | 272,843        | 3,911,561       | 398,142         | 7,697,459           | 484,036.2                      | 119.3                         |
| 4    | Abdominal pain                                         | R10                    | 2,082,258          | 76,448         | 2,027,360       | 224,445         | 3,243,232           | 281,627.8                      | 135.3                         |
| 5    | Irritable bowel syndrome                               | K58                    | 1,457,068          | 10,300         | 1,450,418       | 4,850           | 2,451,092           | 137,119.3                      | 94.1                          |
| 6    | Peptic ulcer disease                                   | K25–K28                | 1,284,171          | 27,199         | 1,272,322       | 15,700          | 2,774,433           | 220,101.5                      | 171.4                         |
| 7    | Fatty liver and other liver diseases <sup>e)</sup>     | K75, K76               | 1,190,876          | 26,849         | 1,174,676       | 10,050          | 2,356,701           | 234,179.7                      | 447                           |
| 8    | Non-infective intestinal disease                       | K52                    | 1,100,626          | 12,800         | 1,090,376       | 27,249          | 1,651,911           | 55,950.7                       | 50.8                          |
| 9    | Benign neoplasm of the colon <sup>f)</sup>             | K635, D120–128         | 1,094,727          | 63,199         | 1,055,578       | 950             | 1,652,263           | 443,292.2                      | 404.9                         |
| 10   | Constipation                                           | K590                   | 685,479            | 10,400         | 677,680         | 34,349          | 1,413,004           | 49,589.7                       | 72.3                          |
| 11   | Functional dyspepsia                                   | K30                    | 660,635            | 2,750          | 658,485         | 5,250           | 1,079,323           | 37,243.7                       | 56.4                          |
| 12   | Chronic hepatitis                                      | B18, K73               | 460,141            | 5,700          | 458,441         | 800             | 1,894,663           | 373,273.2                      | 811.2                         |
| 13   | Nausea and vomiting                                    | R11                    | 460,039            | 9,600          | 452,289         | 41,699          | 636,534             | 24,395.0                       | 53.0                          |
| 14   | Anorectal disorders <sup>g)</sup>                      | K60–62                 | 302,294            | 81,348         | 294,494         | 3,850           | 967,229             | 125,168.7                      | 414.1                         |
| 15   | Cholelithiasis/cholecystitis <sup>h)</sup>             | K80, K81               | 285,193            | 105,947        | 260,644         | 52,398          | 1,746,099           | 553,586.1                      | 3,931.3                       |
| 16   | Malignant neoplasm of the stomach                      | C16                    | 170,195            | 40,599         | 166,445         | 10,650          | 2,406,881           | 538,412.5                      | 3,163.5                       |
| 17   | Benign neoplasm of the stomach, duodenum <sup>i)</sup> | K317, D131, D132, D133 | 160,796            | 23,249         | 157,146         | 400             | 448,439             | 73,577.9                       | 457.6                         |
| 18   | Malignant neoplasm of the colon                        | C18–20                 | 157,545            | 47,499         | 151,396         | 15,799          | 3,081,261           | 775,147.6                      | 4,920.2                       |
| 19   | Functional diarrhea                                    | K591                   | 140,147            | 700            | 139,547         | 900             | 207,294             | 5,376.2                        | 38.4                          |
| 20   | Other GB diseases <sup>j)</sup>                        | K82                    | 134,847            | 7,600          | 133,247         | 700             | 272,994             | 46,419.8                       | 344.2                         |
| 19   | Alcoholic liver disease                                | K70                    | 123,698            | 19,100         | 115,598         | 10,550          | 841,678             | 141,842.6                      | 1,146.7                       |
| 20   | Appendicitis                                           | K35–37                 | 102,398            | 73,149         | 96,148          | 23,750          | 551,788             | 242,131.5                      | 2,364.6                       |

ICD-10, International Classification of Diseases 10th Revision; ER, emergency room; GERD, gastroesophageal reflux disease; GB, gallbladder.

<sup>a)</sup>These values were aggregated based on the primary diagnosis, using weighted values.

<sup>b)</sup>The cost is presented in US \$1,000. The sum of the National Health Insurance coverage costs, patient's co-payment including dental care (excluding non-insured patient co-payments and oriental medicine), and outpatient prescription drug costs excluding pharmacy fees.

<sup>c)</sup>The cost is presented in US \$1.

<sup>d)</sup>Includes reflux esophagitis and heartburn.

<sup>e)</sup>Includes fatty liver, non-alcoholic steatohepatitis, non-alcoholic fatty liver disease, hepatic cysts, and liver abscess.

<sup>f)</sup>Includes polyps of the colon.

<sup>g)</sup>Includes fissure, fistula, abscess, and other anorectal disorders.

<sup>h)</sup>Includes cholangitis

<sup>i)</sup>Includes polyps of the stomach and duodenum.

<sup>j)</sup>Includes polyps and adenomyomatosis of the GB.