

Table S2. Health and medicine category

| Category | Health and medicine |
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| General | Eight disciplines in this subcategory include healthcare science services, public environmental occupational health, health policy services, medical ethics and others. These are generally considered as public goods and OA is very widely accepted. A total of 651,253 articles or 40.6% of total are available for OA service and the recent data in 2021 is 60.6%. (Suppl. table 1) |
| Basic | Twelve disciplines in basic medical science are also high in OA. A total of 915,685 articles or 39.9% are available for OA. (Suppl. table 2) |
| Clinical | Thirteen disciplines are in this category. Infectious diseases, general internal medicine and primary healthcare are in the high group of OA (50-59% in 2000-2021, 74-78% in 2021). Other clinical medicine disciplines are also high. A total of 1,601,713 articles or 40.5% of total are available for OA. (Suppl. table 3, Fig. 3, Suppl. Fig. 3) |
| Organ systems | Twenty-one disciplines are in this category. Every organ system has high figure of proportion and number of documents produced is also increasing. A total of 1,750,733 articles or 37.4% are available for OA. (Suppl. table 4) |
| OA trends | The public demands on health and wellbeing reflect this trend. Authors willingly share their research, and health professionals feel happier if they become popular for their scientific excellence. The high rates of OA in articles on infectious disease and general healthcare are manifestations of the authors' willingness to share. |
| Library service plans | The information on health and medicine is relatively popular to the general public and new development of library services on health would be easy. The library services on health at public library, however, may need some additional connection to medical services. The roles of subject specialist librarians will include inviting local medical and healthcare professionals as volunteers to add values for ancillary services and possible arrangement of further health care services. |

A general summary of four subcategories and their open access trends and possible plans for library services.