

Multimedia Appendix 1:

Infodemiology and Infoveillance: A Scoping Review

Table A1 consists of the complete list of the 338 extracted publications from the JMIR, PubMed, and Scopus databases in the fields of Infodemiology and Infoveillance from 2009 to 2018.

Table A1. List of Infodemiology and Infoveillance Publications from JMIR, Scopus, and PubMed (2009-2018)

| Authors | Year | Title | Journal |
|-------------------------|------|--|---------------------------------------|
| 1 Abbate et al | 2017 | Recruiting Women to a Mobile Health Smoking Cessation Trial: Low- and No-Cost Strategies | JMIR Research Protocols |
| 2 Abbe & Falissard | 2017 | Stopping Antidepressants and Anxiolytics as Major Concerns Reported in Online Health Communities: A Text Mining Approach | JMIR Mental Health |
| 3 Abdellaoui et al. | 2017 | Filtering Entities to Optimize Identification of Adverse Drug Reaction From Social Media: How Can the Number of Words Between Entities in the Messages Help? | JMIR Public Health and Surveillance |
| 4 Abdellaoui et al. | 2018 | Detection of Cases of Noncompliance to Drug Treatment in Patient Forum Posts: Topic Model Approach. | Journal of Medical Internet Research |
| 5 Adams | 2013 | POST-PANOPTIC SURVEILLANCE THROUGH HEALTHCARE RATING SITES: Who's watching whom? | Information Communication and Society |
| 6 Adawi et al. | 2017 | Discrepancies Between Classic and Digital Epidemiology in Searching for the Mayaro Virus: Preliminary Qualitative and Quantitative Analysis of Google Trends | JMIR Public Health and Surveillance |
| 7 Adrover et al. | 2015 | Identifying Adverse Effects of HIV Drug Treatment and Associated Sentiments Using Twitter | JMIR Public Health and Surveillance |
| 8 Adusumalli et al. | 2015 | Assessment of Web-Based Consumer Reviews as a Resource for Drug Performance | Journal of Medical Internet Research |
| 9 Agarwal et al. | 2016 | Impact of Predicting Health Care Utilization Via Web Search Behavior: A Data-Driven Analysis | Journal of Medical Internet Research |
| 10 Albalawi & Sixsmith | 2015 | Agenda Setting for Health Promotion: Exploring an Adapted Model for the Social Media Era | JMIR Public Health and Surveillance |
| 11 Allem et al. | 2017 | Images of Little Cigars and Cigarillos on Instagram Identified by the Hashtag #swisher: Thematic Analysis | Journal of Medical Internet Research |
| 12 Allem et al. | 2018 | Hookah-Related Posts to Twitter From 2017 to 2018: Thematic Analysis. | Journal of Medical Internet Research |
| 13 Allem et al. | 2017 | E-Cigarette Surveillance With Social Media Data: Social Bots, Emerging Topics, and Trends. | JMIR Public Health and Surveillance |
| 14 Allem et al. | 2017 | Identifying Sentiment of Hookah-Related Posts on Twitter | JMIR Public Health and Surveillance |
| 15 Alnemer et al | 2015 | Are Health-Related Tweets Evidence Based? Review and Analysis of Health-Related Tweets on Twitter | Journal of Medical Internet Research |
| 16 Alvarez-Mon et al. | 2018 | Increasing Interest of Mass Communication Media and the General Public in the Distribution of Tweets About Mental Disorders: Observational Study | Journal of Medical Internet Research |
| 17 Alvaro et al. | 2017 | TwiMed: Twitter and PubMed Comparable Corpus of Drugs, Diseases, Symptoms, and Their Relations | JMIR Public Health and Surveillance |
| 18 Anderson et al. | 2017 | Using Social Listening Data to Monitor Misuse and Nonmedical Use of Bupropion: A Content Analysis. | JMIR Public Health and Surveillance |
| 19 Aoki et al. | 2018 | Analysis of the Regionality of the Number of Tweets Related to the 2011 Fukushima Nuclear Power Station Disaster: Content Analysis | JMIR Public Health and Surveillance |
| 20 Arnhold et al | 2014 | Mobile Applications for Diabetics: A Systematic Review and Expert-Based Usability Evaluation Considering the Special Requirements of Diabetes Patients Age 50 Years or Older | Journal of Medical Internet Research |
| 21 Aslam et al. | 2014 | The reliability of tweets as a supplementary method of seasonal influenza surveillance. | Journal of Medical Internet Research |
| 22 Athilingam & Jenkins | 2018 | Mobile Phone Apps to Support Heart Failure Self-Care Management: Integrative Review | JMIR Cardio |
| 23 Ayers et al. | 2012 | A novel evaluation of World No Tobacco day in Latin America. | Journal of Medical Internet Research |
| 24 Ayers et al. | 2016 | Leveraging Big Data to Improve Health Awareness Campaigns: A Novel Evaluation of the Great American Smokeout. | JMIR Public Health and Surveillance |
| 25 Balls-Berry et al | 2018 | Linking Podcasts With Social Media to Promote Community Health and Medical Research: Feasibility Study | JMIR Formative Research |
| 26 Baltrusaitis et al. | 2017 | Determinants of Participants' Follow-Up and Characterization of Representativeness in Flu Near You, A Participatory Disease Surveillance System | JMIR Public Health and Surveillance |
| 27 Ben-Sasson & Yom-Tov | 2016 | Online Concerns of Parents Suspecting Autism Spectrum Disorder in Their Child: Content Analysis of Signs and Automated Prediction of Risk | Journal of Medical Internet Research |
| 28 Berlinberg et al. | 2018 | Monitoring Interest in Herpes Zoster Vaccination: Analysis of Google Search Data. | JMIR Public Health and Surveillance |
| 29 Bernardo et al. | 2013 | Scoping Review on Search Queries and Social Media for Disease Surveillance: A Chronology of Innovation | Journal of Medical Internet Research |
| 30 Berry et al | 2017 | #WhyWeTweetMH: Understanding Why People Use Twitter to Discuss Mental Health Problems | Journal of Medical Internet Research |
| 31 Bian et al. | 2017 | Using Social Media Data to Understand the Impact of Promotional Information on Laypeople's Discussions: A Case Study of Lynch Syndrome | Journal of Medical Internet Research |
| 32 Birnbaum et al. | 2017 | A Collaborative Approach to Identifying Social Media Markers of Schizophrenia by Employing Machine Learning and Clinical Appraisals | Journal of Medical Internet Research |
| 33 Bollegala et al. | 2018 | Causality Patterns for Detecting Adverse Drug Reactions From Social Media: Text Mining Approach | JMIR Public Health and Surveillance |

| | Authors | Year | Title | Journal |
|----|---------------------|-------------|---|---|
| 34 | Bousquet et al. | 2017 | The Adverse Drug Reactions from Patient Reports in Social Media Project: Five Major Challenges to Overcome to Operationalize Analysis and Efficiently Support Pharmacovigilance Process | JMIR Research Protocols |
| 35 | Bragazzi | 2013 | A Google Trends-based approach for monitoring NSSI. | Psychology Research and Behavior Management |
| 36 | Bragazzi | 2013 | Infodemiology and infoveillance of multiple sclerosis in Italy. | Multiple Sclerosis International |
| 37 | Bragazzi et al. | 2016 | Infodemiology of status epilepticus: A systematic validation of the Google Trends-based search queries. | Epilepsy and Behavior |
| 38 | Bragazzi et al. | 2016 | Infodemiological data of West-Nile virus disease in Italy in the study period 2004-2015. | Data in Brief |
| 39 | Bragazzi et al. | 2016 | Infodemiological data concerning silicosis in the USA in the period 2004-2010 correlating with real-world statistical data. | Data in Brief |
| 40 | Braithwaite et al. | 2016 | Validating Machine Learning Algorithms for Twitter Data Against Established Measures of Suicidality | JMIR Mental Health |
| 41 | Brigo & Erro | 2016 | Why do people google movement disorders? An infodemiological study of information seeking behaviors. | Neurological Sciences |
| 42 | Brigo & Trinka | 2015 | Google search behavior for status epilepticus. | Epilepsy and Behavior |
| 43 | Brigo et al. | 2015 | Terminology of psychogenic nonepileptic seizures. | Epilepsia |
| 44 | Brigo et al. | 2014 | Why do people Google epilepsy? An infodemiological study of online behavior for epilepsy-related search terms. | Epilepsy and Behavior |
| 45 | Brigo et al. | 2015 | Wikipedia and neurological disorders. | Journal of Clinical Neuroscience |
| 46 | Brigo et al. | 2018 | Why do people search Wikipedia for information on multiple sclerosis? | Multiple Sclerosis and Related Disorders |
| 47 | Brigo et al. | 2018 | Italian Wikipedia and epilepsy: An infodemiological study of online information-seeking behavior. | Epilepsy and Behavior |
| 48 | Brigo et al. | 2014 | Web search behavior for multiple sclerosis: An infodemiological study. | Multiple Sclerosis and Related Disorders |
| 49 | Brigo et al. | 2015 | Information-seeking behaviour for epilepsy: an infodemiological study of searches for Wikipedia articles. | Epileptic Disorders |
| 50 | Brigo et al. | 2016 | Cancer information disparities on the internet: An infodemiological study | Journal of Cancer Policy |
| 51 | Broniatowski et al. | 2015 | Using Social Media to Perform Local Influenza Surveillance in an Inner-City Hospital: A Retrospective Observational Study | JMIR Public Health and Surveillance |
| 52 | Bubbenzer | 2009 | Infodemiologie as shown by influenza: New opportunities of the Internet [Infodemiologie am beispiel influenza: Die neuen chancen des Internets] | Klinikarzt |
| 53 | Burton et al. | 2012 | "Right time, right place" health communication on Twitter: value and accuracy of location information. | Journal of Medical Internet Research |
| 54 | Callahan et al. | 2015 | Analyzing Information Seeking and Drug-Safety Alert Response by Health Care Professionals as New Methods for Surveillance | Journal of Medical Internet Research |
| 55 | Carrotte et al. | 2017 | "Fitspiration" on Social Media: A Content Analysis of Gendered Images | Journal of Medical Internet Research |
| 56 | Cartwright et al. | 2018 | Identifying National Availability of Abortion Care and Distance From Major US Cities: Systematic Online Search | Journal of Medical Internet Research |
| 57 | Cavazos-Regh et al. | 2014 | Characterizing the Followers and Tweets of a Marijuana-Focused Twitter Handle | Journal of Medical Internet Research |
| 58 | Cawkwell et al. | 2015 | Tracking Hookah Bars in New York: Utilizing Yelp as a Powerful Public Health Tool | JMIR Public Health and Surveillance |
| 59 | Chan et al. | 2013 | Infodemiology of alcohol use in Hong Kong mentioned on blogs: infoveillance study. | Journal of Medical Internet Research |
| 60 | Chen & Dredze | 2018 | Vaccine Images on Twitter: Analysis of What Images are Shared | Journal of Medical Internet Research |
| 61 | Chen et al. [] | 2018 | Nature and Diffusion of Gynecologic Cancer-Related Misinformation on Social Media: Analysis of Tweets | Journal of Medical Internet Research |
| 62 | Chen et al. | 2018 | Does Eating Chicken Feet With Pickled Peppers Cause Avian Influenza? Observational Case Study on Chinese Social Media During the Avian Influenza A (H7N9) Outbreak. | JMIR Public Health and Surveillance |
| 63 | Chen et al. | 2018 | Dynamics of Health Agency Response and Public Engagement in Public Health Emergency: A Case Study of CDC Tweeting Patterns During the 2016 Zika Epidemic. | JMIR Public Health and Surveillance |
| 64 | Chen et al. | 2015 | What Online Communities Can Tell Us About Electronic Cigarettes and Hookah Use: A Study Using Text Mining and Visualization Techniques | Journal of Medical Internet Research |
| 65 | Cheng et al. | 2017 | Assessing Suicide Risk and Emotional Distress in Chinese Social Media: A Text Mining and Machine Learning Study | Journal of Medical Internet Research |
| 66 | Cheng et al. | 2018 | Analyzing Twitter as a Platform for Alzheimer-Related Dementia Awareness: Thematic Analyses of Tweets | JMIR Aging |
| 67 | Cherian et al. | 2018 | Representations of Codeine Misuse on Instagram: Content Analysis | JMIR Public Health and Surveillance |
| 68 | Chew & Eysenbach | 2010 | Pandemics in the age of Twitter: content analysis of Tweets during the 2009 H1N1 outbreak. | PLoS One |
| 69 | Chomutare et al. | 2011 | Features of Mobile Diabetes Applications: Review of the Literature and Analysis of Current Applications Compared Against Evidence-Based Guidelines | Journal of Medical Internet Research |
| 70 | Christmann et al. | 2017 | Stress Management Apps With Regard to Emotion-Focused Coping and Behavior Change Techniques: A Content Analysis | JMIR MHEALTH AND UHEALTH |
| 71 | Chu et al. | 2015 | Electronic Cigarette Marketing Online: a Multi-Site, Multi-Product Comparison | JMIR Public Health and Surveillance |
| 72 | Clyne et al. | 2018 | Using Social Media to Generate and Collect Primary Data: The #ShowsWorkplaceCompassion Twitter Research Campaign | JMIR Public Health and Surveillance |
| 73 | Colditz et al. | 2018 | Toward Real-Time Infoveillance of Twitter Health Messages. | Americal Journal of Public Health |
| 74 | Cole-Lewis et al. | 2015 | Social Listening: A Content Analysis of E-Cigarette Discussions on Twitter | Journal of Medical Internet Research |

| | Authors | Year | Title | Journal |
|-----|-------------------------|-------------|--|--|
| 75 | Cole-Lewis et al. | 2015 | Assessing Electronic Cigarette-Related Tweets for Sentiment and Content Using Supervised Machine Learning | Journal of Medical Internet Research |
| 76 | Conway | 2014 | Ethical Issues in Using Twitter for Public Health Surveillance and Research: Developing a Taxonomy of Ethical Concepts From the Research Literature | Journal of Medical Internet Research |
| 77 | Cortés et al. | 2017 | Twitter for marijuana infodemiology | IEEE |
| 78 | Daniulaityte et al. | 2016 | "When 'Bad' is 'Good'": Identifying Personal Communication and Sentiment in Drug-Related Tweets | JMIR Public Health and Surveillance |
| 79 | Davis et al. | 2017 | Public Response to Obamacare on Twitter | Journal of Medical Internet Research |
| 80 | de Viron et al. | 2013 | Communicating Genetics and Smoking Through Social Media: Are We There Yet? | Journal of Medical Internet Research |
| 81 | Dejohn et al. | 2018 | Identifying and Understanding Communities Using Twitter to Connect About Depression: Cross-Sectional Study | JMIR Mental Health |
| 82 | Delaney et al. | 2014 | Using a Geolocation Social Networking Application to Calculate the Population Density of Sex-Seeking Gay Men for Research and Prevention Services | Journal of Medical Internet Research |
| 83 | Delir Haghighi et al. | 2017 | Investigating Subjective Experience and the Influence of Weather Among Individuals With Fibromyalgia: A Content Analysis of Twitter. | JMIR Public Health and Surveillance |
| 84 | Doan et al. | 2017 | How Do You #relax When You're #stressed? A Content Analysis and Infodemiology Study of Stress-Related Tweets. | JMIR Public Health and Surveillance |
| 85 | Domnich et al. | 2014 | Demand-based web surveillance of sexually transmitted infections in Russia | International Journal of Public Health |
| 86 | Du et al. | 2016 | Gordie Howe's "Miraculous Treatment": Case Study of Twitter Users' Reactions to a Sport Celebrity's Stem Cell Treatment. | JMIR Public Health and Surveillance |
| 87 | Du et al. | 2018 | Public Perception Analysis of Tweets During the 2015 Measles Outbreak: Comparative Study Using Convolutional Neural Network Models | Journal of Medical Internet Research |
| 88 | Duke et al. | 2014 | The Use of Social Media by State Tobacco Control Programs to Promote Smoking Cessation: A Cross-Sectional Study | Journal of Medical Internet Research |
| 89 | Dunn et al. | 2015 | Associations Between Exposure to and Expression of Negative Opinions About Human Papillomavirus Vaccines on Social Media: An Observational Study | Journal of Medical Internet Research |
| 90 | Dyson et al. | 2017 | Social Media for the Dissemination of Cochrane Child Health Evidence: Evaluation Study | Journal of Medical Internet Research |
| 91 | Edney et al. | 2018 | Creating Engaging Health Promotion Campaigns on Social Media: Observations and Lessons From Fitbit and Garmin | Journal of Medical Internet Research |
| 92 | Eklund | 2012 | Tracking changes in search behaviour at a health web site | Studies in Health Technology and Informatics |
| 93 | Espina & Estuar | 2017 | Infodemiology for Syndromic Surveillance of Dengue and Typhoid Fever in the Philippines | Procedia Computer Science |
| 94 | Espina et al. | 2016 | Towards an Infodemiological Algorithm for Classification of Filipino Health Tweets | Procedia Computer Science |
| 95 | Eysenbach | 2011 | Infodemiology and infoveillance tracking online health information and cyberbehavior for public health. | American Journal of Preventive Medicine |
| 96 | Eysenbach | 2009 | Infodemiology and infoveillance: framework for an emerging set of public health informatics methods to analyze search, communication and publication behavior on the Internet. | Journal of Medical Internet Research |
| 97 | Farhadloo et al. | 2018 | Associations of Topics of Discussion on Twitter With Survey Measures of Attitudes, Knowledge, and Behaviors Related to Zika: Probabilistic Study in the United States | JMIR Public Health and Surveillance |
| 98 | Foroughi et al. | 2016 | Googling" for Cancer: An Infodemiological Assessment of Online Search Interests in Australia, Canada, New Zealand, the United Kingdom, and the United States. | JMIR Cancer |
| 99 | Gabarron et al. [] | 2014 | Tweet Content Related to Sexually Transmitted Diseases: No Joking Matter | Journal of Medical Internet Research |
| 100 | Gabarron et al. | 2015 | Is There a Weekly Pattern for Health Searches on Wikipedia and Is the Pattern Unique to Health Topics? | Journal of Medical Internet Research |
| 101 | García-Díaz et al. | 2018 | Opinion mining for measuring the social perception of infectious diseases. an infodemiology approach | Communications in Computer and Information Science |
| 102 | Gayle et al. | 2017 | Public Response to Scientific Misconduct: Assessing Changes in Public Sentiment Toward the Stimulus-Triggered Acquisition of Pluripotency (STAP) Cell Case via Twitter | JMIR Public Health and Surveillance |
| 103 | Genes et al. | 2017 | Analysis of Twitter Users' Sharing of Official New York Storm Response Messages | Medicine 2.0 |
| 104 | Gianfredi et al. | 2018 | Monitoring public interest toward pertussis outbreaks: an extensive Google Trends-based analysis. | Public Health |
| 105 | Gianfredi et al. | 2018 | Harnessing Big Data for Communicable Tropical and Sub-Tropical Disorders: Implications From a Systematic Review of the Literature. | Frontiers in Public Health |
| 106 | Giat & Yom-Tov | 2018 | Evidence From Web-Based Dietary Search Patterns to the Role of B12 Deficiency in Non-Specific Chronic Pain: A Large-Scale Observational Study | Journal of Medical Internet Research |
| 107 | Gittelman et al. | 2015 | A New Source of Data for Public Health Surveillance: Facebook Likes | Journal of Medical Internet Research |
| 108 | Gohil et al. | 2018 | Sentiment Analysis of Health Care Tweets: Review of the Methods Used | JMIR Public Health and Surveillance |
| 109 | Gough et al. | 2017 | Tweet for Behavior Change: Using Social Media for the Dissemination of Public Health Messages | JMIR Public Health and Surveillance |
| 110 | Grajales et al. | 2014 | Social Media: A Review and Tutorial of Applications in Medicine and Health Care | Journal of Medical Internet Research |
| 111 | Greaves et al. | 2013 | Use of Sentiment Analysis for Capturing Patient Experience From Free-Text Comments Posted Online | Journal of Medical Internet Research |
| 112 | Griffis et al. | 2014 | Use of Social Media Across US Hospitals: Descriptive Analysis of Adoption and Utilization | Journal of Medical Internet Research |
| 113 | Gruzd & Haythornthwaite | 2013 | Enabling Community Through Social Media | Journal of Medical Internet Research |
| 114 | Gu et al. | 2014 | Importance of Internet Surveillance in Public Health Emergency Control and Prevention: Evidence From a Digital Epidemiologic Study During Avian Influenza A H7N9 Outbreaks | Journal of Medical Internet Research |

| | Authors | Year | Title | Journal |
|-----|--------------------------|-------------|---|--|
| 115 | Guy et al. | 2012 | Social media: A systematic review to understand the evidence and application in infodemiology | Lecture Notes of the Institute for Computer Sciences |
| 116 | Hamad et al. | 2016 | Toward a Mixed-Methods Research Approach to Content Analysis in The Digital Age: The Combined Content-Analysis Model and its Applications to Health Care Twitter Feeds. | Journal of Medical Internet Research |
| 117 | Hammer | 2017 | Ethical Considerations When Using Social Media for Research. | Oncology Nursing Forum |
| 118 | Hand et al. | 2016 | Assessing the Viability of Social Media for Disseminating Evidence-Based Nutrition Practice Guideline Through Content Analysis of Twitter Messages and Health Professional Interviews: An Observational Study | Journal of Medical Internet Research |
| 119 | Hanson et al. | 2013 | Tweaking and Tweeting: Exploring Twitter for Nonmedical Use of a Psychostimulant Drug (Adderall) Among College Students | Journal of Medical Internet Research |
| 120 | Hanson et al. | 2013 | An Exploration of Social Circles and Prescription Drug Abuse Through Twitter | Journal of Medical Internet Research |
| 121 | Harris et al. [] | 2014 | Are Public Health Organizations Tweeting to the Choir? Understanding Local Health Department Twitter Followership | Journal of Medical Internet Research |
| 122 | Harris et al. | 2014 | Tweeting for and Against Public Health Policy: Response to the Chicago Department of Public Health's Electronic Cigarette Twitter Campaign | Journal of Medical Internet Research |
| 123 | Hébert et al. | 2017 | Online Dissemination Strategies of a Canada Research Chair: Overview and Lessons Learned | JMIR Research Protocols |
| 124 | Hendriks et al. | 2018 | Social Drinking on Social Media: Content Analysis of the Social Aspects of Alcohol-Related Posts on Facebook and Instagram | Journal of Medical Internet Research |
| 125 | Hill et al. | 2011 | Natural supplements for H1N1 influenza: retrospective observational infodemiology study of information and search activity on the Internet. | Journal of Medical Internet Research |
| 126 | Hingle et al. | 2013 | Collection and Visualization of Dietary Behavior and Reasons for Eating Using Twitter | Journal of Medical Internet Research |
| 127 | Hswen et al. | 2018 | Monitoring Online Discussions About Suicide Among Twitter Users With Schizophrenia: Exploratory Study | JMIR Mental Health |
| 128 | Huang et al. | 2018 | Public Opinions Toward Diseases: Infodemiological Study on News Media Data | Journal of Medical Internet Research |
| 129 | Huesch et al. | 2017 | Frequencies of Private Mentions and Sharing of Mammography and Breast Cancer Terms on Facebook: A Pilot Study | Journal of Medical Internet Research |
| 130 | Jankowski & Hoffmann | 2016 | Can Google Searches Predict the Popularity and Harm of Psychoactive Agents? | Journal of Medical Internet Research |
| 131 | Jones et al. | 2018 | Novel Approach to Cluster Patient-Generated Data Into Actionable Topics: Case Study of a Web-Based Breast Cancer Forum. | JMIR Medical Informatics |
| 132 | Jung et al. | 2015 | Identifying Key Hospital Service Quality Factors in Online Health Communities | Journal of Medical Internet Research |
| 133 | Jung et al. | 2017 | Ontology-Based Approach to Social Data Sentiment Analysis: Detection of Adolescent Depression Signals | Journal of Medical Internet Research |
| 134 | Kadry et al. | 2011 | Analysis of 4999 Online Physician Ratings Indicates That Most Patients Give Physicians a Favorable Rating | Journal of Medical Internet Research |
| 135 | Kagashe et al. | 2017 | Enhancing Seasonal Influenza Surveillance: Topic Analysis of Widely Used Medicinal Drugs Using Twitter Data | Journal of Medical Internet Research |
| 136 | Kalf et al. | 2018 | Use of Social Media in the Assessment of Relative Effectiveness: Explorative Review With Examples From Oncology | JMIR Cancer |
| 137 | Kandadai et al. | 2016 | Measuring Health Information Dissemination and Identifying Target Interest Communities on Twitter: Methods Development and Case Study of the @SafetyMD Network | JMIR Research Protocols |
| 138 | Kandula et al. | 2017 | Subregional Nowcasts of Seasonal Influenza Using Search Trends. | Journal of Medical Internet Research |
| 139 | Katsuki et al. | 2015 | Establishing a Link Between Prescription Drug Abuse and Illicit Online Pharmacies: Analysis of Twitter Data. | Journal of Medical Internet Research |
| 140 | Keller et al. | 2018 | Reproductive Health and Medication Concerns for Patients With Inflammatory Bowel Disease: Thematic and Quantitative Analysis Using Social Listening. | Journal of Medical Internet Research |
| 141 | Keller et al. | 2017 | Public Perceptions Regarding Use of Virtual Reality in Health Care: A Social Media Content Analysis Using Facebook | Journal of Medical Internet Research |
| 142 | Kendra et al. | 2015 | Characterizing the Discussion of Antibiotics in the Twittersphere: What is the Bigger Picture? | Journal of Medical Internet Research |
| 143 | Khan et al. | 2012 | A robust and scalable framework for detecting self-reported illness from twitter | IEEE |
| 144 | Khoury et al. | 2012 | Knowledge integration at the center of genomic medicine. | Genetics in Medicine |
| 145 | Kim et al. | 2015 | Using Twitter Data to Gain Insights into E-cigarette Marketing and Locations of Use: An Infoveillance Study. | Journal of Medical Internet Research |
| 146 | Kim et al. | 2014 | Investigating the congruence of crowdsourced information with official government data: the case of pediatric clinics. | Journal of Medical Internet Research |
| 147 | Kim et al. | 2017 | Scaling Up Research on Drug Abuse and Addiction Through Social Media Big Data. | Journal of Medical Internet Research |
| 148 | Kim et al. | 2016 | Garbage in, Garbage Out: Data Collection, Quality Assessment and Reporting Standards for Social Media Data Use in Health Research, Infodemiology and Digital Disease Detection. | Journal of Medical Internet Research |
| 149 | Kim et al. | 2017 | Classification of Twitter Users Who Tweet About E-Cigarettes | JMIR Public Health and Surveillance |
| 150 | Klembczyk et al. | 2016 | Google Flu Trends Spatial Variability Validated Against Emergency Department Influenza-Related Visits. | Journal of Medical Internet Research |
| 151 | Koh et al. | 2014 | Stroke Experiences in Weblogs: A Feasibility Study of Sex Differences | Journal of Medical Internet Research |
| 152 | Konheim-Kalkstein et al. | 2018 | How Women Evaluate Birth Challenges: Analysis of Web-Based Birth Stories | JMIR Pediatrics and Parenting |
| 153 | Koschack et al. | 2015 | Scientific Versus Experiential Evidence: Discourse Analysis of the Chronic Cerebrospinal Venous Insufficiency Debate in a Multiple Sclerosis Forum | Journal of Medical Internet Research |

| | Authors | Year | Title | Journal |
|-----|------------------------|------|---|---|
| 154 | Kostkova et al. | 2013 | Major Infection Events Over 5 Years: How Is Media Coverage Influencing Online Information Needs of Health Care Professionals and the Public? | Journal of Medical Internet Research |
| 155 | Krueger & Young | 2015 | Twitter: A Novel Tool for Studying the Health and Social Needs of Transgender Communities | JMIR Mental Health |
| 156 | Kurzinger et al. | 2018 | Web-Based Signal Detection Using Medical Forums Data in France: Comparative Analysis | Journal of Medical Internet Research |
| 157 | Lachmar et al. | 2017 | #MyDepressionLooksLike: Examining Public Discourse About Depression on Twitter | JMIR Mental Health |
| 158 | Lama et al. | 2018 | Discordance Between Human Papillomavirus Twitter Images and Disparities in Human Papillomavirus Risk and Disease in the United States: Mixed-Methods Analysis | Journal of Medical Internet Research |
| 159 | Lardon et al. | 2015 | Adverse Drug Reaction Identification and Extraction in Social Media: A Scoping Review | Journal of Medical Internet Research |
| 160 | Lau et al. | 2011 | The role of social media for patients and consumer health. Contribution of the IMIA Consumer Health Informatics Working Group. | Yearbook of Medical Informatics |
| 161 | Lavorgna et al. | 2018 | e-Health and multiple sclerosis: An update. | Multiple Sclerosis |
| 162 | Lazard et al. | 2016 | E-Cigarette Social Media Messages: A Text Mining Analysis of Marketing and Consumer Conversations on Twitter | JMIR Public Health and Surveillance |
| 163 | Leal Neto et al. | 2017 | Saúde na Copa: The World's First Application of Participatory Surveillance for a Mass Gathering at FIFA World Cup 2014, Brazil | JMIR Public Health and Surveillance |
| 164 | Lee et al. | 2014 | What Are Health-Related Users Tweeting? A Qualitative Content Analysis of Health-Related Users and Their Messages on Twitter | Journal of Medical Internet Research |
| 165 | Lee et al. | 2016 | Examining the Relationship Between Past Orientation and US Suicide Rates: An Analysis Using Big Data-Driven Google Search Queries | Journal of Medical Internet Research |
| 166 | Lenoir et al. | 2017 | Raising Awareness About Cervical Cancer Using Twitter: Content Analysis of the 2015 #SmearForSmear Campaign | Journal of Medical Internet Research |
| 167 | Leung et al. | 2018 | Social Media Users' Perception of Telemedicine and mHealth in China: Exploratory Study | JMIR mHealth and uHealth |
| 168 | Li et al. | 2018 | Understanding Users' Vaping Experiences from Social Media: Initial Study Using Sentiment Opinion Summarization Techniques. | Journal of Medical Internet Research |
| 169 | Liang & Scammon | 2013 | Incidence of Online Health Information Search: A Useful Proxy for Public Health Risk Perception | Journal of Medical Internet Research |
| 170 | Lienemann et al. | 2017 | Methods for Coding Tobacco-Related Twitter Data: A Systematic Review | Journal of Medical Internet Research |
| 171 | Ling & Lee | 2016 | Disease Monitoring and Health Campaign Evaluation Using Google Search Activities for HIV and AIDS, Stroke, Colorectal Cancer, and Marijuana Use in Canada: A Retrospective Observational Study. | JMIR Public Health and Surveillance |
| 172 | Liu et al. | 2011 | The quality and characteristics of leading general hospitals' websites in China. | Journal of Medical Systems |
| 173 | Liu et al. | 2016 | Use of Social Media in the Diabetes Community: An Exploratory Analysis of Diabetes-Related Tweets | JMIR Diabetes |
| 174 | Liu et al. | 2017 | Identifying Potential Norovirus Epidemics in China via Internet Surveillance | Journal of Medical Internet Research |
| 175 | Liu et al. | 2017 | Using Real-Time Social Media Technologies to Monitor Levels of Perceived Stress and Emotional State in College Students: A Web-Based Questionnaire Study | JMIR Mental Health |
| 176 | Liu et al. | 2018 | Monitoring Freshman College Experience Through Content Analysis of Tweets: Observational Study | JMIR Public Health and Surveillance |
| 177 | Livelo & Cheng | 2018 | Intelligent dengue infoveillance using gated recurrent neural learning and cross-label frequencies | IEEE International Conference on Agents |
| 178 | Lu et al. | 2018 | Accurate Influenza Monitoring and Forecasting Using Novel Internet Data Streams: A Case Study in the Boston Metropolis | JMIR Public Health and Surveillance |
| 179 | Lyles et al. | 2016 | Applying Sparse Machine Learning Methods to Twitter: Analysis of the 2012 Change in Pap Smear Guidelines. A Sequential Mixed-Methods Study | JMIR Public Health and Surveillance |
| 180 | Mackey & Liang | 2013 | Global Reach of Direct-to-Consumer Advertising Using Social Media for Illicit Online Drug Sales | Journal of Medical Internet Research |
| 181 | Mackey et al. | 2018 | Solution to Detect, Classify, and Report Illicit Online Marketing and Sales of Controlled Substances via Twitter: Using Machine Learning and Web Forensics to Combat Digital Opioid Access | Journal of Medical Internet Research |
| 182 | Madden et al. | 2017 | The Seasonal Periodicity of Healthy Contemplations About Exercise and Weight Loss: Ecological Correlational Study | JMIR Public Health and Surveillance |
| 183 | Mahoney et al. | 2015 | The Digital Distribution of Public Health News Surrounding the Human Papillomavirus Vaccination: A Longitudinal Infodemiology Study. | JMIR Public Health and Surveillance |
| 184 | Mahroum et al. | 2018 | An infodemiological investigation of the so-called "Fluad effect" during the 2014/2015 influenza vaccination campaign in Italy: Ethical and historical implications. | Human Vaccines and Immunotherapeutics |
| 185 | Majumder et al. | 2016 | Utilizing Nontraditional Data Sources for Near Real-Time Estimation of Transmission Dynamics During the 2015-2016 Colombian Zika Virus Disease Outbreak | JMIR Public Health and Surveillance |
| 186 | Manchaiah et al. | 2018 | Representation of Tinnitus in the US Newspaper Media and in Facebook Pages: Cross-Sectional Analysis of Secondary Data | Interactive Journal of Medical Research |
| 187 | Mao et al. | 2014 | An Internet-Based Epidemiological Investigation of the Outbreak of H7N9 Avian Influenza A in China Since Early 2013 | Journal of Medical Internet Research |
| 188 | Marcon et al. | 2016 | Chiropractic and Spinal Manipulation Therapy on Twitter: Case Study Examining the Presence of Critiques and Debates. | JMIR Public Health and Surveillance |
| 189 | Marcus et al. | 2012 | What Are Young Adults Saying About Mental Health? An Analysis of Internet Blogs | Journal of Medical Internet Research |
| 190 | Martinez et al. | 2017 | iOS Appstore-Based Phone Apps for Diabetes Management: Potential for Use in Medication Adherence | JMIR Diabetes |
| 191 | Martinez-Arroyo et al. | 2018 | Potential uses of an infodemiology approach for health-care services for rheumatology. | Clinical Rheumatology |
| 192 | Martinez-Millana et al | 2017 | Evaluating the Social Media Performance of Hospitals in Spain: A Longitudinal and Comparative Study | Journal of Medical Internet Research |
| 193 | Martins-Filho et al. | 2018 | Femicide trends in Brazil: relationship between public interest and mortality rates. | Archives of Womens Mental Health |

| | Authors | Year | Title | Journal |
|-----|--------------------|-------------|--|--------------------------------------|
| 194 | Massey et al. | 2016 | Applying Multiple Data Collection Tools to Quantify Human Papillomavirus Vaccine Communication on Twitter | Journal of Medical Internet Research |
| 195 | Matsuda et al. | 2017 | Analysis of Patient Narratives in Disease Blogs on the Internet: An Exploratory Study of Social Pharmacovigilance | JMIR Public Health and Surveillance |
| 196 | Mavragani & Ochoa | 2018 | Forecasting AIDS prevalence in the United States using online search traffic data | Journal of Big Data |
| 197 | Mavragani & Ochoa | 2018 | Infoveillance of infectious diseases in USA: STDs, tuberculosis, and hepatitis | Journal of Big Data |
| 198 | Mavragani et al. | 2018 | Assessing the Methods, Tools, and Statistical Approaches in Google Trends Research: Systematic Review. | Journal of Medical Internet Research |
| 199 | Mavragani et al. | 2018 | Integrating Smart Health in the US Health Care System: Infodemiology Study of Asthma Monitoring in the Google Era. | JMIR Public Health and Surveillance |
| 200 | Mazzocut et al. | 2016 | Web Conversations About Complementary and Alternative Medicines and Cancer: Content and Sentiment Analysis | Journal of Medical Internet Research |
| 201 | McNaughton et al. | 2014 | Monitoring of Internet Forums to Evaluate Reactions to the Introduction of Reformulated OxyContin to Deter Abuse | Journal of Medical Internet Research |
| 202 | Meaney et al. | 2016 | Reaction on Twitter to a Cluster of Perinatal Deaths: A Mixed Method Study. | JMIR Public Health and Surveillance |
| 203 | Mejova et al. | 2018 | Online Health Monitoring using Facebook Advertisement Audience Estimates in the United States: Evaluation Study. | JMIR Public Health and Surveillance |
| 204 | Melver et al. | 2015 | Characterizing Sleep Issues Using Twitter | Journal of Medical Internet Research |
| 205 | Menachemi et al. | 2017 | Using Web-Based Search Data to Study the Public's Reactions to Societal Events: The Case of the Sandy Hook Shooting. | JMIR Public Health and Surveillance |
| 206 | Mendiola et al. | 2015 | Valuable Features in Mobile Health Apps for Patients and Consumers: Content Analysis of Apps and User Ratings | JMIR mHealth and uHealth |
| 207 | Metwally et al. | 2017 | Using Social Media to Characterize Public Sentiment Toward Medical Interventions Commonly Used for Cancer Screening: An Observational Study | Journal of Medical Internet Research |
| 208 | Miller et al. | 2017 | What Are People Tweeting About Zika? An Exploratory Study Concerning Its Symptoms, Treatment, Transmission, and Prevention | JMIR Public Health and Surveillance |
| 209 | Mishori et al. | 2014 | Mapping physician Twitter networks: describing how they work as a first step in understanding connectivity, information flow, and message diffusion. | Journal of Medical Internet Research |
| 210 | Mnadla et al. | 2016 | Infodemiological data of Ironman Triathlon in the study period 2004-2013. | Data in Brief |
| 211 | Moccia et al. | 2018 | Neurology and the Internet: a review. | Neurological Sciences |
| 212 | Mollema et al. | 2015 | Disease Detection or Public Opinion Reflection? Content Analysis of Tweets, Other Social Media, and Online Newspapers During the Measles Outbreak in the Netherlands in 2013 | Journal of Medical Internet Research |
| 213 | Mowery et al. | 2017 | Understanding Depressive Symptoms and Psychosocial Stressors on Twitter: A Corpus-Based Study | Journal of Medical Internet Research |
| 214 | Mukhija et al. | 2017 | Effectivity of Awareness Months in Increasing Internet Search Activity for Top Malignancies Among Women. | JMIR Public Health and Surveillance |
| 215 | Muralidhara & Paul | 2018 | #Healthy Selfies: Exploration of Health Topics on Instagram | JMIR Public Health and Surveillance |
| 216 | Myslin et al. | 2013 | Using Twitter to Examine Smoking Behavior and Perceptions of Emerging Tobacco Products | Journal of Medical Internet Research |
| 217 | Nagar et al. | 2014 | A case study of the New York City 2012-2013 influenza season with daily geocoded Twitter data from temporal and spatiotemporal perspectives. | Journal of Medical Internet Research |
| 218 | Nagel et al. | 2013 | The complex relationship of realspace events and messages in cyberspace: case study of influenza and pertussis using tweets. | Journal of Medical Internet Research |
| 219 | Nakada et al. | 2014 | Development of a national agreement on human papillomavirus vaccination in Japan: an infodemiology study. | Journal of Medical Internet Research |
| 220 | Nakhasi et al. | 2014 | Online Social Networks That Connect Users to Physical Activity Partners: A Review and Descriptive Analysis | Journal of Medical Internet Research |
| 221 | Nascimento et al. | 2014 | Real-time sharing and expression of migraine headache suffering on Twitter: a cross-sectional infodemiology study. | Journal of Medical Internet Research |
| 222 | Nguyen et al. | 2016 | Building a National Neighborhood Dataset From Geotagged Twitter Data for Indicators of Happiness, Diet, and Physical Activity | JMIR Public Health and Surveillance |
| 223 | Nishimoto et al. | 2016 | Estimating the Duration of Public Concern After the Fukushima Dai-ichi Nuclear Power Station Accident From the Occurrence of Radiation Exposure-Related Terms on Twitter: A Retrospective Data Analysis. | JMIR Public Health and Surveillance |
| 224 | Noll-Hussong | 2017 | Whiplash Syndrome Reloaded: Digital Echoes of Whiplash Syndrome in the European Internet Search Engine Context. | JMIR Public Health and Surveillance |
| 225 | Nsoesie et al. | 2014 | Guess Who's Not Coming to Dinner? Evaluating Online Restaurant Reservations for Disease Surveillance | Journal of Medical Internet Research |
| 226 | Odlum et al. | 2018 | How Twitter Can Support the HIV/AIDS Response to Achieve the 2030 Eradication Goal: In-Depth Thematic Analysis of World AIDS Day Tweets. | JMIR Public Health and Surveillance |
| 227 | Oldroyd et al. | 2018 | Identifying Methods for Monitoring Foodborne Illness: Review of Existing Public Health Surveillance Techniques. | JMIR Public Health and Surveillance |
| 228 | Oser et al. | 2017 | A Novel Approach to Identifying Barriers and Facilitators in Raising a Child With Type 1 Diabetes: Qualitative Analysis of Caregiver Blogs | JMIR Diabetes |
| 229 | Ozan-Rafferty | 2014 | In the Words of the Medical Tourist: An Analysis of Internet Narratives by Health Travelers to Turkey | Journal of Medical Internet Research |
| 230 | Pan et al. | 2018 | The Significance of Witness Sensors for Mass Casualty Incidents and Epidemic Outbreaks | Journal of Medical Internet Research |
| 231 | Park & Hong | 2018 | Identification of Primary Medication Concerns Regarding Thyroid Hormone Replacement Therapy From Online Patient Medication Reviews: Text Mining of Social Network Data | Journal of Medical Internet Research |
| 232 | Peiper et al. | 2017 | Patterns of Twitter Behavior Among Networks of Cannabis Dispensaries in California | Journal of Medical Internet Research |

| | Authors | Year | Title | Journal |
|-----|-------------------------|------|---|--|
| 233 | Pervaiz et al. | 2012 | FluBreaks: Early Epidemic Detection from Google Flu Trends | Journal of Medical Internet Research |
| 234 | Pesala et al. | 2017 | Health Information-Seeking Patterns of the General Public and Indications for Disease Surveillance: Register-Based Study Using Lyme Disease. | JMIR Public Health and Surveillance |
| 235 | Pesala et al. | 2017 | Health Care Professionals' Evidence-Based Medicine Internet Searches Closely Mimic the Known Seasonal Variation of Lyme Borreliosis: A Register-Based Study | JMIR Public Health and Surveillance |
| 236 | Phillips et al. | 2018 | Relationship Between State-Level Google Online Search Volume and Cancer Incidence in the United States: Retrospective Study. | Journal of Medical Internet Research |
| 237 | Poirier et al. | 2018 | Real Time Influenza Monitoring Using Hospital Big Data in Combination with Machine Learning Methods: Comparison Study. | JMIR Public Health and Surveillance |
| 238 | Pretorius et al. | 2018 | Sudden Infant Death Syndrome and Safe Sleep on Twitter: Analysis of Influences and Themes to Guide Health Promotion Efforts | JMIR Pediatrics and Parenting |
| 239 | Priest et al. | 2016 | Finding the Patient's Voice Using Big Data: Analysis of Users' Health-Related Concerns in the ChaCha Question-and-Answer Service (2009-2012). | Journal of Medical Internet Research |
| 240 | Rabarison et al. | 2017 | Measuring Audience Engagement for Public Health Twitter Chats: Insights From #LiveFitNOLA | JMIR Public Health and Surveillance |
| 241 | Radin & Sciascia | 2017 | Infodemiology of systemic lupus erythematosus using Google Trends. | Lupus |
| 242 | Radzikowski et al. | 2016 | The Measles Vaccination Narrative in Twitter: A Quantitative Analysis | JMIR Public Health and Surveillance |
| 243 | Ragestar-Mojarad et al. | 2016 | Using Social Media Data to Identify Potential Candidates for Drug Repurposing: A Feasibility Study | JMIR Research Protocols |
| 244 | Rastegar-Mojarad et al. | 2015 | Collecting and Analyzing Patient Experiences of Health Care From Social Media | JMIR Research Protocols |
| 245 | Ricard et al. | 2018 | Exploring the Utility of Community-Generated Social Media Content for Detecting Depression: An Analytical Study on Instagram | Journal of Medical Internet Research |
| 246 | Risson et al. | 2016 | Patterns of Treatment Switching in Multiple Sclerosis Therapies in US Patients Active on Social Media: Application of Social Media Content Analysis to Health Outcomes Research | Journal of Medical Internet Research |
| 247 | Roberts et al. | 2015 | Globalization of Continuing Professional Development by Journal Clubs via Microblogging: A Systematic Review | Journal of Medical Internet Research |
| 248 | Robillard et al. | 2013 | Utilizing Social Media to Study Information-Seeking and Ethical Issues in Gene Therapy | Journal of Medical Internet Research |
| 249 | Rocchetti et al. | 2017 | Attitudes of Crohn's Disease Patients: Infodemiology Case Study and Sentiment Analysis of Facebook and Twitter Posts. | JMIR Public Health and Surveillance |
| 250 | Rocheleau et al. | 2015 | An Observational Study of Social and Emotional Support in Smoking Cessation Twitter Accounts: Content Analysis of Tweets | Journal of Medical Internet Research |
| 251 | Rose et al. | 2017 | Perceptions of Menthol Cigarettes Among Twitter Users: Content and Sentiment Analysis | Journal of Medical Internet Research |
| 252 | Rosenblum & Yom-Tov | 2017 | Seeking Web-Based Information About Attention Deficit Hyperactivity Disorder: Where, What, and When | Journal of Medical Internet Research |
| 253 | Sadah et al. | 2015 | A Study of the Demographics of Web-Based Health-Related Social Media Users | Journal of Medical Internet Research |
| 254 | Sadah et al. | 2016 | Demographic-Based Content Analysis of Web-Based Health-Related Social Media | Journal of Medical Internet Research |
| 255 | Saha et al. | 2017 | Characterizing Awareness of Schizophrenia Among Facebook Users by Leveraging Facebook Advertisement Estimates | Journal of Medical Internet Research |
| 256 | Samaras et al. | 2017 | Syndromic Surveillance Models Using Web Data: The Case of Influenza in Greece and Italy Using Google Trends | JMIR Public Health and Surveillance |
| 257 | Santos & Matos | 2014 | Analysing Twitter and web queries for flu trend prediction. | Theoretical Biology and Medical Modelling |
| 258 | Sanz-Lorente et al. | 2018 | Web 2.0 Tools in the Prevention of Curable Sexually Transmitted Diseases: Scoping Review | Journal of Medical Internet Research |
| 259 | Sarker et al. | 2017 | Discovering Cohorts of Pregnant Women From Social Media for Safety Surveillance and Analysis | Journal of Medical Internet Research |
| 260 | Sato et al. | 2015 | Blog Posting After Lung Cancer Notification: Content Analysis of Blogs Written by Patients or Their Families | JMIR Cancer |
| 261 | Schlichthorst et al. | 2018 | Influencing the Conversation About Masculinity and Suicide: Evaluation of the Man Up Multimedia Campaign Using Twitter Data | JMIR Mental Health |
| 262 | Sciascia & Radin | 2017 | What can Google and Wikipedia can tell us about a disease? Big Data trends analysis in Systemic Lupus Erythematosus. | International Journal of Medical Informatics |
| 263 | Sciascia et al. | 2018 | Infodemiology of antiphospholipid syndrome: Merging informatics and epidemiology. | European Journal of Rheumatology |
| 264 | Seabrook et al. | 2018 | Predicting Depression From Language-Based Emotion Dynamics: Longitudinal Analysis of Facebook and Twitter Status Updates | Journal of Medical Internet Research |
| 265 | Seidl et al. | 2018 | What Do Germans Want to Know About Skin Cancer? A Nationwide Google Search Analysis From 2013 to 2017 | Journal of Medical Internet Research |
| 266 | Sentana-Lledo et al. | 2016 | Seasons, Searches, and Intentions: What The Internet Can Tell Us About The Bed Bug (Hemiptera: Cimicidae) Epidemic. | Journal of Medical Entomology |
| 267 | Seo et al. | 2014 | Cumulative Query Method for Influenza Surveillance Using Search Engine Data | Journal of Medical Internet Research |
| 268 | Sewalk et al. | 2018 | Using Twitter to Examine Web-Based Patient Experience Sentiments in the United States: Longitudinal Study | Journal of Medical Internet Research |
| 269 | SeyyedHosseini et al. | 2018 | An infodemiology study on breast cancer in Iran: Health information supply versus health information demand in PubMed and Google Trends | Electronic Library |
| 270 | SeyyedHosseini et al. | 2017 | Infodemiology: A new presence concept in human information interaction based on eyensbach's view | Iranian Journal of Information Processing Management |
| 271 | SeyyedHosseini et al. | 2017 | Scientific publication behavior versus information seeking behavior: An infodemiological study on stomach cancer | Webology |
| 272 | Sharpe et al. | 2016 | Evaluating Google, Twitter, and Wikipedia as Tools for Influenza Surveillance Using Bayesian Change Point Analysis: A Comparative Analysis | Journal of Medical Internet Research |

| | Authors | Year | Title | Journal |
|-----|---------------------------|-------------|---|---|
| 273 | Shi & Salmon | 2018 | Identifying Opinion Leaders to Promote Organ Donation on Social Media: Network Study | Journal of Medical Internet Research |
| 274 | Simpson et al. | 2018 | Detecting Novel and Emerging Drug Terms Using Natural Language Processing: A Social Media Corpus Study | Journal of Medical Internet Research |
| 275 | Sinha et al. | 2018 | Social Media Impact of the Food and Drug Administration's Drug Safety Communication Messaging About Zolpidem: Mixed-Methods Analysis | Journal of Medical Internet Research |
| 276 | Sinnenberg et al. | 2018 | Content Analysis of Metaphors About Hypertension and Diabetes on Twitter: Exploratory Mixed-Methods Study | JMIR Diabetes |
| 277 | Smith et al. | 2017 | Variations in Facebook Posting Patterns Across Validated Patient Health Conditions: A Prospective Cohort Study | Journal of Medical Internet Research |
| 278 | Spyropoulos et al. | 2018 | Uptake and Utilization of the Management of Anticoagulation in the Perioperative Period App: Longitudinal Analysis | JMIR mHealth and uHealth |
| 279 | Staal et al. | 2018 | New Tobacco and Tobacco-Related Products: Early Detection of Product Development, Marketing Strategies, and Consumer Interest. | JMIR Public Health and Surveillance |
| 280 | Stefanidis et al. | 2017 | Zika in Twitter: Temporal Variations of Locations, Actors, and Concepts | JMIR Public Health and Surveillance |
| 281 | Sudau et al. | 2014 | Sources of Information and Behavioral Patterns in Online Health Forums: Observational Study | Journal of Medical Internet Research |
| 282 | Sueki | 2015 | The association of suicide-related Twitter use with suicidal behaviour: a cross-sectional study of young internet users in Japan. | Journal of Affective Disorders |
| 283 | Sugawara et al. | 2016 | Medical Institutions and Twitter: A Novel Tool for Public Communication in Japan | JMIR Public Health and Surveillance |
| 284 | Sugawara et al. | 2017 | Scientific Misconduct and Social Media: Role of Twitter in the Stimulus Triggered Acquisition of Pluripotency Cells Scandal | Journal of Medical Internet Research |
| 285 | Surian et al. | 2016 | Characterizing Twitter Discussions About HPV Vaccines Using Topic Modeling and Community Detection | Journal of Medical Internet Research |
| 286 | Tafti et al. | 2017 | Adverse Drug Event Discovery Using Biomedical Literature: A Big Data Neural Network Adventure | JMIR Medical Informatics |
| 287 | Tana et al. | 2018 | Diurnal Variations of Depression-Related Health Information Seeking: Case Study in Finland Using Google Trends Data. | JMIR Mental Health |
| 288 | Tangherlini et al. | 2016 | "Mommy Blogs" and the Vaccination Exemption Narrative: Results From A Machine-Learning Approach for Story Aggregation on Parenting Social Media Sites | JMIR Public Health and Surveillance |
| 289 | Tapi Nzali et al. | 2017 | What Patients Can Tell Us: Topic Analysis for Social Media on Breast Cancer | JMIR Medical Informatics |
| 290 | Thackeray et al. | 2013 | Analysis of the Purpose of State Health Departments' Tweets: Information Sharing, Engagement, and Action | Journal of Medical Internet Research |
| 291 | Tighe et al. | 2015 | The Painful Tweet: Text, Sentiment, and Community Structure Analyses of Tweets Pertaining to Pain | Journal of Medical Internet Research |
| 292 | Timpka et al. | 2014 | Performance of eHealth Data Sources in Local Influenza Surveillance: A 5-Year Open Cohort Study | Journal of Medical Internet Research |
| 293 | Tinschert et al. | 2017 | The Potential of Mobile Apps for Improving Asthma Self-Management: A Review of Publicly Available and Well-Adopted Asthma Apps | JMIR mhealth and uHealth |
| 294 | Tougas et al. | 2018 | Social Media Content About Children's Pain and Sleep: Content and Network Analysis | JMIR Pediatrics and Parenting |
| 295 | Triemstra et al. | 2018 | Correlations Between Hospitals' Social Media Presence and Reputation Score and Ranking: Cross-Sectional Analysis | Journal of Medical Internet Research |
| 296 | Troullos et al. | 2014 | Common Cold Symptoms in Children: Results of an Internet-Based Surveillance Program | Journal of Medical Internet Research |
| 297 | Tsuya et al. | 2014 | Do Cancer Patients Tweet? Examining the Twitter Use of Cancer Patients in Japan | Journal of Medical Internet Research |
| 298 | Tufts et al. | 2018 | Characterizing Tweet Volume and Content About Common Health Conditions Across Pennsylvania: Retrospective Analysis | JMIR Public Health and Surveillance |
| 299 | Tyrawski & DeAndrea | 2015 | Pharmaceutical Companies and Their Drugs on Social Media: A Content Analysis of Drug Information on Popular Social Media Sites | Journal of Medical Internet Research |
| 300 | Utengen et al. | 2017 | Patient Participation at Health Care Conferences: Engaged Patients Increase Information Flow, Expand Propagation, and Deepen Engagement in the Conversation of Tweets Compared to Physicians or Researchers | Journal of Medical Internet Research |
| 301 | van Lent et al. | 2017 | Too Far to Care? Measuring Public Attention and Fear for Ebola Using Twitter | Journal of Medical Internet Research |
| 302 | Vasconcellos-Silva et al. | 2017 | Using Google Trends Data to Study Public Interest in Breast Cancer Screening in Brazil: Why Not a Pink February? | JMIR Public Health and Surveillance |
| 303 | Vickey & Breslin | 2017 | Online Influence and Sentiment of Fitness Tweets: Analysis of Two Million Fitness Tweets | JMIR Public Health and Surveillance |
| 304 | Wagner et al. | 2017 | Estimating the Population Impact of a New Pediatric Influenza Vaccination Program in England Using Social Media Content | Journal of Medical Internet Research |
| 305 | Wakamiya | 2018 | Twitter-Based Influenza Detection After Flu Peak via Tweets With Indirect Information: Text Mining Study. | JMIR Public Health and Surveillance |
| 306 | Wang & Chen | 2018 | Economic Recession and Obesity-Related Internet Search Behavior in Taiwan: Analysis of Google Trends Data. | JMIR Public Health and Surveillance |
| 307 | Wang et al. | 2015 | Forecasting the Incidence of Dementia and Dementia-Related Outpatient Visits With Google Trends: Evidence From Taiwan | Journal of Medical Internet Research |
| 308 | Weeg et al. | 2015 | Using Twitter to Measure Public Discussion of Diseases: A Case Study | JMIR Public Health and Surveillance |
| 309 | Williams et al. | 2013 | How Twitter Is Studied in the Medical Professions: A Classification of Twitter Papers Indexed in PubMed | MECIDINE 2.0 |
| 310 | Winchester et al. | 2017 | Quality of Social Media and Web-Based Information Regarding Inappropriate Nuclear Cardiac Stress Testing and the Choosing Wisely Campaign: A Cross-Sectional Study | Interactive Journal of Medical Research |
| 311 | Wittmeier et al. | 2014 | Analysis of a Parent-Initiated Social Media Campaign for Hirschsprung's Disease | Journal of Medical Internet Research |
| 312 | Wong et al. | 2013 | Accessing Suicide-Related Information on the Internet: A Retrospective Observational Study of Search Behavior | Journal of Medical Internet Research |

| | Authors | Year | Title | Journal |
|-----|-----------------------|-------------|--|--|
| 313 | Wong et al. | 2015 | Twitter Sentiment Predicts Affordable Care Act Marketplace Enrollment | Journal of Medical Internet Research |
| 314 | Wongkoblap et al. | 2017 | Researching Mental Health Disorders in the Era of Social Media: Systematic Review. | Journal of Medical Internet Research |
| 315 | Woo et al. | 2016 | Estimating Influenza Outbreaks Using Both Search Engine Query Data and Social Media Data in South Korea. | Journal of Medical Internet Research |
| 316 | Wood et al. | 2018 | Public Awareness of Uterine Power Morcellation Through US Food and Drug Administration Communications: Analysis of Google Trends Search Term Patterns | JMIR Public Health and Surveillance |
| 317 | Xu & Liu | 2015 | mHealthApps: A Repository and Database of Mobile Health Apps | JMIR mhealth and uHealth |
| 318 | Xu et al. | 2018 | Predicting Prediabetes Through Facebook Postings: Protocol for a Mixed-Methods Study. | JMIR Research Protocols |
| 319 | Xu et al. | 2016 | Leveraging Social Media to Promote Public Health Knowledge: Example of Cancer Awareness via Twitter | JMIR Public Health and Surveillance |
| 320 | Yagahara et al. | 2018 | Relationships Among Tweets Related to Radiation: Visualization Using Co-Occurring Networks | JMIR Public Health and Surveillance |
| 321 | Yang et al. | 2017 | Effects of the Ambient Fine Particulate Matter on Public Awareness of Lung Cancer Risk in China: Evidence from the Internet-Based Big Data Platform | JMIR Public Health and Surveillance |
| 322 | Yin et al. | 2015 | A Scalable Framework to Detect Personal Health Mentions on Twitter. | Journal of Medical Internet Research |
| 323 | Yom-Tov & Gabrilovich | 2013 | Postmarket drug surveillance without trial costs: discovery of adverse drug reactions through large-scale analysis of web search queries. | Journal of Medical Internet Research |
| 324 | Yom-Tov et al. | 2014 | Seeking Insights About Cycling Mood Disorders via Anonymized Search Logs | Journal of Medical Internet Research |
| 325 | Yom-Tov et al. | 2015 | Automatic Identification of Web-Based Risk Markers for Health Events | Journal of Medical Internet Research |
| 326 | Yom-Tov et al. | 2014 | Detecting disease outbreaks in mass gatherings using Internet data. | Journal of Medical Internet Research |
| 327 | Yom-Tov Lev-Ran | 2017 | Adverse Reactions Associated With Cannabis Consumption as Evident From Search Engine Queries | JMIR Public Health and Surveillance |
| 328 | Young | 2018 | Social Media as a New Vital Sign: Commentary | Journal of Medical Internet Research |
| 329 | Zeraatkar & Ahmadi | 2018 | Trends of infodemiology studies: a scoping review. | Health Information and Libraries Journal |
| 330 | Zhan et al. | 2017 | Identifying Topics for E-Cigarette User-Generated Contents: A Case Study From Multiple Social Media Platforms. | Journal of Medical Internet Research |
| 331 | Zhang et al. | 2016 | Tracking Dabbing Using Search Query Surveillance: A Case Study in the United States | Journal of Medical Internet Research |
| 332 | Zhang et al. | 2018 | Automated Identification of Hookahs (Waterpipes) on Instagram: An Application in Feature Extraction Using Convolutional Neural Network and Support Vector Machine Classification | Journal of Medical Internet Research |
| 333 | Zhang et al. | 2014 | Methodology of developing a smartphone application for crisis research and its clinical application. | Technology and Health Care |
| 334 | Zhang et al. | 2013 | Electronic word of mouth on twitter about physical activity in the United States: exploratory infodemiology study. | Journal of Medical Internet Research |
| 335 | Zhao & Yang | 2018 | Drug Repositioning to Accelerate Drug Development Using Social Media Data: Computational Study on Parkinson Disease | Journal of Medical Internet Research |
| 336 | Zheluk et al. | 2012 | Searching for Truth: Internet Search Patterns as a Method of Investigating Online Responses to a Russian Illicit Drug Policy Debate | Journal of Medical Internet Research |
| 337 | Zheluk et al. | 2013 | Internet search patterns of human immunodeficiency virus and the digital divide in the Russian Federation: infoveillance study. | Journal of Medical Internet Research |
| 338 | Zheluk et al. | 2014 | Internet search and krokodil in the Russian Federation: an infoveillance study. | Journal of Medical Internet Research |

Table A2 consists of the complete list of the 338 examined publications categorized by data source employed, i.e. Google, Twitter, Facebook, Instagram, Wikipedia, Other Social Media, Blogs/Forums/Communities, Websites/Platforms, News Outlets/Media, Electronic Health Records/Databases/Call records/Online Surveys, Other Search Engines, Mobile Apps, and Reviews.

Table A2. List of publications by data source employed

| Authors | Google | Twitter | Facebook | Instagram | Wikipedia | Other Social Media | Blogs/Forums/Communities | Websites/Platforms | News Outlets/Media | Electronic Health Records/Databases/Call records/Online Surveys | Other Search Engines | Online Survey | Mobile App | N/A | Review |
|-------------------------------|--------|---------|----------|-----------|-----------|--------------------|--------------------------|--------------------|--------------------|---|----------------------|---------------|------------|-----|--------|
| 1 Abbate et al., 2017 | | | | | | | | | | | | | ✓ | | |
| 2 Abbe & Falissard, 2017 | | | | | | | ✓ | | | | | | | | |
| 3 Abdellaoui et al., 2017 | | | | | | | ✓ | | | | | | | | |
| 4 Abdellaoui et al., 2018 | | | | | | | ✓ | | | | | | | | |
| 5 Adams, 2013 | | | | | | | | ✓ | | | | | | | |
| 6 Adawi et al., 2017 | ✓ | | | | | | | | | | | | | | |
| 7 Adrover et al., 2015 | | ✓ | | | | | | | | | | | | | |
| 8 Adusumalli et al., 2015 | | | | | | | | ✓ | | | | | | | |
| 9 Agarwal et al., 2016 | | | | | | | | | | | ✓ | | | | |
| 10 Albalawi & Sixsmith, 2015 | | ✓ | | | | | | | ✓ | | | | | | |
| 11 Allem et al., 2017 | | | | ✓ | | | | | | | | | | | |
| 12 Allem et al., 2018 | | ✓ | | | | | | | | | | | | | |
| 13 Allem et al., 2017 | | ✓ | | | | | | | | | | | | | |
| 14 Allem et al., 2017 | | ✓ | | | | | | | | | | | | | |
| 15 Alnemer et al., 2015 | | ✓ | | | | | | | | | | | | | |
| 16 Alvarez-Mon et al., 2018 | | ✓ | | | | | | | | | | | | | |
| 17 Alvaro et al., 2017 | | ✓ | | | | | | ✓ | | | | | | | |
| 18 Anderson et al., 2017 | | | | | | | ✓ | | | | | | | | |
| 19 Aoki et al., 2018 | | ✓ | | | | | | | | | | | | | |
| 20 Arnhold et al | | | | | | | | | | | | | ✓ | | |
| 21 Aslam et al., 2014 | | ✓ | | | | | | | | | | | | | |
| 22 Athilingam & Jenkins | | | | | | | | | | | | | ✓ | | ✓ |
| 23 Ayers et al., 2012 | ✓ | | | | | | | | ✓ | | | | | | |
| 24 Ayers et al., 2016 | ✓ | ✓ | | | ✓ | | | | ✓ | ✓ | | | | | |
| 25 Balls-Berry et al., 2018 | | ✓ | ✓ | | | ✓ | | | | | | | | | |
| 26 Baltrusaitis et al., 2017 | | | | | | | | ✓ | | | | | | | |
| 27 Ben-Sasson & Yom-Tov, 2016 | | | | | | | ✓ | | | | | | | | |
| 28 Berlinberg et al., 2018 | ✓ | | | | | | | | | | | | | | |
| 29 Bernardo et al., 2013 | | | | | | | | | | | | | | | ✓ |
| 30 Berry et al., 2017 | | ✓ | | | | | | | | | | | | | |

| Authors | Google | Twitter | Facebook | Instagram | Wikipedia | Other Social Media | Blogs/Forums/Communities | Websites/Platforms | News Outlets/Media | Electronic Health Records Databases/Call records/Online Surveys | Other Search Engines | Online Survey | Mobile App | N/A | Review |
|---------|---------------------------|---------|----------|-----------|-----------|--------------------|--------------------------|--------------------|--------------------|---|----------------------|---------------|------------|-----|--------|
| 31 | Bian et al., 2017 | ✓ | | | | | | | | | | | | | |
| 32 | Birnbaum et al., 2017 | ✓ | | | | | | | | | | | | | |
| 33 | Bollegala et al., 2018 | ✓ | | | | | | | | | | | | | |
| 34 | Bousquet et al., 2017 | | | | | | ✓ | ✓ | | | | | | | |
| 35 | Bragazzi, 2013 | ✓ | | | | | | | | | | | | | |
| 36 | Bragazzi, 2013 | ✓ | | | | | | | | | | | | | |
| 37 | Bragazzi et al., 2016 | ✓ | | | | | | | | | | | | | |
| 38 | Bragazzi et al., 2016 | ✓ | | | | | | | | | | | | | |
| 39 | Bragazzi et al., 2016 | ✓ | | | | | | | | | | | | | |
| 40 | Braithwaite et al., 2016 | | ✓ | | | | | | | | | | | | |
| 41 | Brigo & Erro, 2016 | ✓ | | | ✓ | | | | | | | | | | |
| 42 | Brigo & Trinka, 2015 | ✓ | | | | | | | | | | | | | |
| 43 | Brigo et al., 2015 | ✓ | | | | | | ✓ | | | | | | | |
| 44 | Brigo et al., 2014 | ✓ | | | | | | | | | | | | | |
| 45 | Brigo et al., 2015 | | | | ✓ | | | | | | | | | | |
| 46 | Brigo et al., 2018 | | | | ✓ | | | | | | | | | | |
| 47 | Brigo et al., 2018 | | | | ✓ | | | | | | | | | | |
| 48 | Brigo et al., 2014 | ✓ | | | | | | | | | | | | | |
| 49 | Brigo et al., 2015 | | | | ✓ | | | | | | | | | | |
| 50 | Brigo et al., 2016 | ✓ | | | | | | | | | | | | | |
| 51 | Broniatowski et al., 2015 | ✓ | ✓ | | | | | | | | | | | | |
| 52 | Bubenzer, 2009 | | | | | | | | | | | | | ✓ | |
| 53 | Burton et al., 2012 | ✓ | | | | | | | | | | | | | |
| 54 | Callahan et al., 2015 | | | | | | | ✓ | | | | | | | |
| 55 | Carrotte et al., 2017 | ✓ | ✓ | | ✓ | ✓ | | | | | | | | | |
| 56 | Cartwright et al., 2018 | ✓ | | | | | | | | | ✓ | | | | |
| 57 | Cavazos-Regh et al., 2014 | | ✓ | | | | | | | | | | | | |
| 58 | Cawkwell et al., 2015 | | | | | | ✓ | | | | | | | | |
| 59 | Chan et al., 2013 | | | | | | ✓ | | | | | | | | |
| 60 | Chen & Dredze, 2018 | | ✓ | | | | | | | | | | | | |
| 61 | Chen et al., 2018 | | | | | ✓ | | | | | | | | | |
| 62 | Chen et al., 2018 | | | | | | | ✓ | | | | | | | |
| 63 | Chen et al., 2018 | | ✓ | | | | | | | | | | | | |
| 64 | Chen et al., 2015 | | | | | | | ✓ | | | | | | | |
| 65 | Cheng et al., 2017 | | | | | | | ✓ | | | | | | | |

| Authors | Google | Twitter | Facebook | Instagram | Wikipedia | Other Social Media | Blogs/Forums/Communities | Websites/Platforms | News Outlets/Media | Electronic Health Records Databases/Call records/Online Surveys | Other Search Engines | Online Survey | Mobile App | N/A | Review |
|---------|-----------------------------|---------|----------|-----------|-----------|--------------------|--------------------------|--------------------|--------------------|---|----------------------|---------------|------------|-----|--------|
| 66 | Cheng et al., 2018 | ✓ | | | | | | | | | | | | | |
| 67 | Cherian et al., 2018 | | | ✓ | | | | | | | | | | | |
| 68 | Chew & Eysenbach, 2010 | ✓ | | | | | | | | | | | | | |
| 69 | Chomutare et al., 2011 | | | | | | | | | | | | ✓ | | |
| 70 | Christmann et al., 2017 | | | | | | | | | | | | ✓ | | |
| 71 | Chu et al., 2015 | ✓ | ✓ | ✓ | ✓ | | | | | | | | | | |
| 72 | Clyne et al., 2018 | | ✓ | | | | | | | | | | | | |
| 73 | Colditz et al., 2018 | | ✓ | | | | | | | | | | | | |
| 74 | Cole-Lewis et al., 2015 | | ✓ | | | | | | | | | | | | |
| 75 | Cole-Lewis et al., 2015 | | ✓ | | | | | | | | | | | | |
| 76 | Conway, 2014 | | | | | | | ✓ | | | | | | | |
| 77 | Cortés et al., 2017 | | ✓ | | | | | | | | | | | | |
| 78 | Daniulaityte et al., 2016 | | ✓ | | | | | | | | | | | | |
| 79 | Davis et al., 2017 | | ✓ | | | | | | | | | | | | |
| 80 | de Viron et al., 2013 | | ✓ | ✓ | | ✓ | | | | | | | | | |
| 81 | Dejohn et al., 2018 | | ✓ | | | | | | | | | | | | |
| 82 | Delaney et al., 2014 | | | | | | | | | | | | ✓ | | |
| 83 | Delir Haghighi et al., 2017 | | ✓ | | | | | | | | | | | | |
| 84 | Doan et al., 2017 | | ✓ | | | | | | | | | | | | |
| 85 | Domnich et al., 2014 | | | | | | | | | | ✓ | | | | |
| 86 | Du et al., 2016 | | ✓ | | | | | | | | | | | | |
| 87 | Du et al., 2018 | | ✓ | | | | | | | | | | | | |
| 88 | Duke et al., 2014 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | | | | | | | | |
| 89 | Dunn et al., 2015 | | ✓ | | | | | | | | | | | | |
| 90 | Dyson et al., 2017 | | ✓ | | | | ✓ | | | | | | | | |
| 91 | Edney et al., 2018 | | ✓ | ✓ | ✓ | | | | | | | | | | |
| 92 | Eklund, 2012 | | | | | | | ✓ | | | | | | | |
| 93 | Espina & Estuar, 2017 | | ✓ | | | | | | | | | | | | |
| 94 | Espina et al., 2016 | | ✓ | | | | | | | | | | | | |
| 95 | Eysenbach, 2011 | | | | | | | | | | | | | ✓ | |
| 96 | Eysenbach, 2009 | | | | | | | | | | | | | ✓ | |
| 97 | Farhadloo et al., 2018 | | ✓ | | | | | | | | | | | | |
| 98 | Foroughi et al., 2016 | ✓ | | | | | | | | | | | | | |
| 99 | Gabarron et al., 2014 | | ✓ | | | | | | | | | | | | |
| 100 | Gabarron et al., 2015 | | | | ✓ | | | | | | | | | | |

| Authors | Google | Twitter | Facebook | Instagram | Wikipedia | Other Social Media | Blogs/Forums/Communities | Websites/Platforms | News Outlets/Media | Electronic Health Records Databases/Call records/Online Surveys | Other Search Engines | Online Survey | Mobile App | N/A | Review |
|---------|------------------------------|---------|----------|-----------|-----------|--------------------|--------------------------|--------------------|--------------------|---|----------------------|---------------|------------|-----|--------|
| 101 | García-Díaz et al., 2018 | ✓ | | | | | | | | | | | | | |
| 102 | Gayle et al., 2017 | | ✓ | | | | | | | | | | | | |
| 103 | Genes et al., 2017 | | ✓ | | | | | | | | | | | | |
| 104 | Gianfredi et al., 2018 | ✓ | | | | | | | | | | | | | |
| 105 | Gianfredi et al., 2018 | | | | | | | | | | | | | | ✓ |
| 106 | Giat & Yom-Tov, 2018 | | | | | | | | | | ✓ | | | | |
| 107 | Gittelman et al., 2015 | | | ✓ | | | | | | | | | | | |
| 108 | Gohil et al., 2018 | | | | | | | | | | | | | | ✓ |
| 109 | Gough et al., 2017 | | ✓ | | | | | | | | | | | | |
| 110 | Grajales et al., 2014 | ✓ | ✓ | | | ✓ | ✓ | ✓ | | | ✓ | | | | |
| 111 | Greaves et al., 2013 | | | | | | | ✓ | | | | | | | |
| 112 | Griffis et al., 2014 | | ✓ | ✓ | | ✓ | | | | | | | | | |
| 113 | Gruzd & Haythornthwaite 2013 | | ✓ | | | | | | | | | | | | |
| 114 | Gu et al., 2014 | | | | | | ✓ | | | | ✓ | | | | |
| 115 | Guy et al., 2012 | | | | | | | | | | | | | | ✓ |
| 116 | Hamad et al., 2016 | | | | | | | | | | | | | ✓ | |
| 117 | Hammer, 2017 | | | | | | | | | | | | | ✓ | |
| 118 | Hand et al., 2016 | | ✓ | | | | | | | | | | | | |
| 119 | Hanson et al., 2013 | | ✓ | | | | | | | | | | | | |
| 120 | Hanson et al., 2013 | | ✓ | | | | | | | | | | | | |
| 121 | Harris et al., 2014 | | ✓ | | | | | | | | | | | | |
| 122 | Harris et al., 2014 | | ✓ | | | | | | | | | | | | |
| 123 | Hébert et al., 2017 | ✓ | ✓ | | | | | ✓ | | | | | | | |
| 124 | Hendriks et al., 2018 | | | ✓ | ✓ | | | | | | | | | | |
| 125 | Hill et al., 2011 | ✓ | | | | | | ✓ | | | | | | | |
| 126 | Hingle et al., 2013 | | ✓ | | | | | | | | | | | | |
| 127 | Hswen et al., 2018 | | ✓ | | | | | | | | | | | | |
| 128 | Huang et al., 2018 | | | | | | | | ✓ | | | | | | |
| 129 | Huesch et al., 2017 | | | ✓ | | | | | | | | | | | |
| 130 | Jankowski & Hoffmann, 2016 | ✓ | | | | | | | | | | | | | |
| 131 | Jones et al., 2018 | | | | | | ✓ | | | | | | | | |
| 132 | Jung et al., 2015 | | | | | | ✓ | | | | | | | | |
| 133 | Jung et al., 2017 | | | | | | | ✓ | | | | | | | |
| 134 | Kadry et al., 2011 | ✓ | | | | | | ✓ | | | | | | | |
| 135 | Kagashe et al., 2017 | | ✓ | | | | | | | | | | | | |

| Authors | Google | Twitter | Facebook | Instagram | Wikipedia | Other Social Media | Blogs/Forums/Communities | Websites/Platforms | News Outlets/Media | Electronic Health Records Databases/Call records/Online Surveys | Other Search Engines | Online Survey | Mobile App | N/A | Review |
|------------------------------------|--------|---------|----------|-----------|-----------|--------------------|--------------------------|--------------------|--------------------|---|----------------------|---------------|------------|-----|--------|
| 136 Kalf et al., 2018 | | | | | | | | | | | | | | | ✓ |
| 137 Kandadai et al., 2016 | | ✓ | | | | | | | | | | | | | |
| 138 Kandula et al., 2017 | ✓ | | | | | | | | | | | | | | |
| 139 Katsuki et al., 2015 | | ✓ | | | | | | | | | | | | | |
| 140 Keller et al., 2018 | | | ✓ | | | | | ✓ | | | | | | | |
| 141 Keller et al., 2017 | | | ✓ | | | | | | | | | | | | |
| 142 Kendra et al., 2015 | | ✓ | | | | | | | | | | | | | |
| 143 Khan et al., 2012 | | ✓ | | | | | | | | | | | | | |
| 144 Khoury et al., 2012 | | | | | | | | | | | | | | ✓ | |
| 145 Kim et al., 2015 | | ✓ | | | | | | | | | | | | | |
| 146 Kim et al., 2014 | | | | | | | ✓ | | | | | | | | |
| 147 Kim et al., 2017 | | | | | | | | | | | | | | | ✓ |
| 148 Kim et al., 2016 | | ✓ | | | | | | | | | | | | | |
| 149 Kim et al., 2017 | | ✓ | | | | | | | | | | | | | |
| 150 Klembczyk et al., 2016 | ✓ | | | | | | | | | | | | | | |
| 151 Koh et al., 2014 | | | | | | | ✓ | | | | | | | | |
| 152 Konheim-Kalkstein et al., 2018 | | | | | | | ✓ | | | | | | | | |
| 153 Koschack et al., 2015 | | | | | | | ✓ | | | | | | | | |
| 154 Kostkova et al., 2013 | ✓ | | | | | | | ✓ | ✓ | | | | | | |
| 155 Krueger & Young, 2015 | | ✓ | | | | | | | | | | | | | |
| 156 Kurzinger et al., 2018 | | | | | | | ✓ | | | | | | | | |
| 157 Lachmar et al., 2017 | | ✓ | | | | | | | | | | | | | |
| 158 Lama et al., 2018 | | ✓ | | | | | | | | | | | | | |
| 159 Lardon et al., 2015 | | | | | | | | | | | | | | | ✓ |
| 160 Lau et al., 2011 | | | | | | | | | | | | | | | ✓ |
| 161 Lavorgna et al., 2018 | | | | | | | | | | | | | | | ✓ |
| 162 Lazard et al., 2016 | | ✓ | | | | | | | | | | | | | |
| 163 Leal Neto et al., 2017 | | | | | | | | | | | | | ✓ | | |
| 164 Lee et al., 2014 | | ✓ | | | | | | | | | | | | | |
| 165 Lee et al., 2016 | ✓ | | | | | | | | | | | | | | |
| 166 Lenoir et al., 2017 | | ✓ | | | | | | | | | | | | | |
| 167 Leung et al., 2018 | | | | | | | | ✓ | | | | | | | |
| 168 Li et al., 2018 | | | | | | | | ✓ | | | | | | | |
| 169 Liang & Scammon, 2013 | ✓ | | | | | | | | | | | | | | |
| 170 Lienemann et al., 2017 | | | | | | | | | | | | | | | ✓ |

| Authors | Google | Twitter | Facebook | Instagram | Wikipedia | Other Social Media | Blogs/Forums/Communities | Websites/Platforms | News Outlets/Media | Electronic Health Records Databases/Call records/Online Surveys | Other Search Engines | Online Survey | Mobile App | N/A | Review |
|---------|-------------------------------|---------|----------|-----------|-----------|--------------------|--------------------------|--------------------|--------------------|---|----------------------|---------------|------------|-----|--------|
| 171 | Ling & Lee, 2016 | ✓ | | | | | | | | | | | | | |
| 172 | Liu et al., 2010 | | | | | | | ✓ | | | | | | | |
| 173 | Liu et al., 2016 | | ✓ | | | | | | | | | | | | |
| 174 | Liu et al., 2017 | | | | | | | | | | | ✓ | | | |
| 175 | Liu et al., 2017 | | ✓ | | | | | | | | | | | | |
| 176 | Liu et al., 2018 | | ✓ | | | | | | | | | | | | |
| 177 | Livelo & Cheng, 2018 | | ✓ | | | | | | | | | | | | |
| 178 | Lu et al., 2018 | ✓ | ✓ | | | | | ✓ | | ✓ | | | | | |
| 179 | Lyles et al., 2016 | | ✓ | | | | | | | | | | | | |
| 180 | Mackey & Liang, 2013 | ✓ | ✓ | ✓ | | ✓ | | | | | | | | | |
| 181 | Mackey et al., 2018 | | ✓ | | | | | | | | | | | | |
| 182 | Madden et al., 2017 | ✓ | | | | | | | | | | | | | |
| 183 | Mahoney et al., 2015 | | ✓ | | | | | | ✓ | | | | | | |
| 184 | Mahroum et al., 2018 | ✓ | | | | | | | | | | | | | |
| 185 | Majumder et al., 2016 | ✓ | | | | | | ✓ | | | | | | | |
| 186 | Manchaiah et al., 2018 | | ✓ | | | | | | ✓ | | | | | | |
| 187 | Mao et al., 2014 | | | | | | | ✓ | | | | | | | |
| 188 | Marcon et al., 2016 | | ✓ | | | | | | | | | | | | |
| 189 | Marcus et al., 2012 | | | | | | ✓ | | | | | | | | |
| 190 | Martinez et al., 2017 | | | | | | | | | | | | ✓ | | |
| 191 | Martinez-Arroyo et al., 2018 | ✓ | | | | | | | | | | | | | |
| 192 | Martinez-Millana et al., 2017 | ✓ | ✓ | ✓ | | ✓ | | | | | | | | | |
| 193 | Martins-Filho et al., 2018 | ✓ | | | | | | | | | | | | | |
| 194 | Massey et al., 2016 | | ✓ | | | | | | | | | | | | |
| 195 | Matsuda et al., 2017 | | | | | | ✓ | | | | | | | | |
| 196 | Mavragani & Ochoa, 2018 | ✓ | | | | | | | | | | | | | |
| 197 | Mavragani & Ochoa, 2018 | ✓ | | | | | | | | | | | | | |
| 198 | Mavragani et al., 2018 | ✓ | | | | | | | | | | | | | |
| 199 | Mavragani et al., 2018 | ✓ | | | | | | | | | | | | | |
| 200 | Mazzocut et al., 2016 | | | | | | | ✓ | | | | | | | |
| 201 | McNaughton et al., 2014 | | | | | | ✓ | | | | | | | | |
| 202 | Meaney et al., 2016 | | ✓ | | | | | | | | | | | | |
| 203 | Mejova et al., 2018 | | | ✓ | | | | | | | | | | | |
| 204 | Melver et al., 2015 | | ✓ | | | | | | | | | | | | |
| 205 | Menachemi et al., 2017 | | | | | | | | | | | ✓ | | | |

| Authors | Google | Twitter | Facebook | Instagram | Wikipedia | Other Social Media | Blogs/Forums/Communities | Websites/Platforms | News Outlets/Media | Electronic Health Records Databases/Call records/Online Surveys | Other Search Engines | Online Survey | Mobile App | N/A | Review |
|------------------------------|--------|---------|----------|-----------|-----------|--------------------|--------------------------|--------------------|--------------------|---|----------------------|---------------|------------|-----|--------|
| 206 Mendiola, 2015 | | | | | | | | | | | | | | ✓ | |
| 207 Metwally et al., 2017 | | ✓ | | | | | | | | | | | | | |
| 208 Miller et al., 2017 | | ✓ | | | | | | | | | | | | | |
| 209 Mishori et al., 2014 | | ✓ | | | | | | | | | | | | | |
| 210 Mnadla et al., 2016 | ✓ | | | | | | | | | | | | | | |
| 211 Moccia et al., 2018 | | | | | | | | | | | | | | | ✓ |
| 212 Mollema et al., 2015 | | ✓ | ✓ | | | | ✓ | ✓ | ✓ | | | | | | |
| 213 Mowery et al., 2017 | | ✓ | | | | | | | | | | | | | |
| 214 Mukhija et al., 2017 | ✓ | | | | | | | | | | | | | | |
| 215 Muralidhara & Paul, 2018 | | | | ✓ | | | | | | | | | | | |
| 216 Myslin et al., 2013 | | ✓ | | | | | | | | | | | | | |
| 217 Nagar et al., 2014 | ✓ | ✓ | | | | | | | | | | | | | |
| 218 Nagel et al., 2013 | | ✓ | | | | | | | | | | | | | |
| 219 Nakada et al., 2014 | | | | | | | | ✓ | ✓ | | | | | | |
| 220 Nakhasi et al., 2014 | ✓ | | | | | | | ✓ | | | | | | | |
| 221 Nascimento et al., 2014 | | ✓ | | | | | | | | | | | | | |
| 222 Nguyen et al., 2016 | | ✓ | | | | | | | | | | | | | |
| 223 Nishimoto et al., 2016 | | ✓ | | | | | | | | | | | | | |
| 224 Noll-Hussong, 2017 | ✓ | | | | | | | | | | | | | | |
| 225 Nsoesie et al., 2014 | ✓ | | | | | | | ✓ | | | | | | | |
| 226 Odlum et al., 2018 | | ✓ | | | | | | | | | | | | | |
| 227 Oldroyd et al., 2018 | | | | | | | | | | | | | | | ✓ |
| 228 Oser et al., 2017 | | | | | | | ✓ | | | | | | | | |
| 229 Ozan-Rafferty, 2014 | ✓ | | | | | | ✓ | | | | | | | | |
| 230 Pan et al., 2018 | | | | | | | | | | | | | | ✓ | |
| 231 Park & Hong, 2018 | | | | | | | | ✓ | | | | | | | |
| 232 Peiper et al., 2017 | | ✓ | | | | | | | | | | | | | |
| 233 Pervaiz et al., 2012 | ✓ | | | | | | | | | | | | | | |
| 234 Pesala et al., 2017 | | | | | | | | | | ✓ | | | | | |
| 235 Pesala et al., 2017 | | | | | | | | | | ✓ | | | | | |
| 236 Phillips et al., 2018 | ✓ | | | | | | | | | | | | | | |
| 237 Poirier et al., 2018 | ✓ | | | | | | | | | ✓ | | | | | |
| 238 Pretorius et al., 2018 | | ✓ | | | | | | | | | | | | | |
| 239 Priest et al., 2016 | | | | | | | | ✓ | | | | | | | |
| 240 Rabarison et al., 2017 | | ✓ | | | | | | | | | | | | | |

| Authors | Google | Twitter | Facebook | Instagram | Wikipedia | Other Social Media | Blogs/Forums/Communities | Websites/Platforms | News Outlets/Media | Electronic Health Records Databases/Call records/Online Surveys | Other Search Engines | Online Survey | Mobile App | N/A | Review |
|---------|-------------------------------|---------|----------|-----------|-----------|--------------------|--------------------------|--------------------|--------------------|---|----------------------|---------------|------------|-----|--------|
| 241 | Radin & Sciascia, 2017 | ✓ | | | | | | | | | | | | | |
| 242 | Radzikowski et al., 2016 | | ✓ | | | | | | | | | | | | |
| 243 | Ragestar-Mojarad et al., 2016 | | | | | | | ✓ | | | | | | | |
| 244 | Rastegar-Mojarad et al., 2015 | | | | | | ✓ | | | | | | | | |
| 245 | Ricard et al., 2018 | | | ✓ | | | | ✓ | | | | | | | |
| 246 | Risson et al., 2016 | | ✓ | ✓ | | | ✓ | | | | | | | | |
| 247 | Robillard et al., 2013 | | | | | | ✓ | | | | | | | | |
| 248 | Rocchetti et al., 2017 | | ✓ | | | | | | | | | | | | |
| 249 | Rocheleau et al., 2015 | | ✓ | | | | | | | | | | | | |
| 250 | Roberts et al., 2015 | | ✓ | | | | | | | | | | | | |
| 251 | Rose et al., 2017 | | ✓ | | | | | | | | | | | | |
| 252 | Rosenblum & Yom-Tov, 2017 | | | | | | ✓ | | | | ✓ | | | | |
| 253 | Sadah et al., 2015 | ✓ | ✓ | | | | ✓ | ✓ | | | | | | | |
| 254 | Sadah et al., 2016 | ✓ | ✓ | | | | ✓ | ✓ | | | | | | | |
| 255 | Saha et al., 2017 | ✓ | | ✓ | | | | | | | | | | | |
| 256 | Samaras et al., 2017 | ✓ | | | | | | | | | | | | | |
| 257 | Santos & Matos, 2014 | | ✓ | | | | | | | | | | | | |
| 258 | Sanz-Lorente et al., 2018 | | ✓ | ✓ | ✓ | ✓ | | | | | | | | | |
| 259 | Sarker et al., 2017 | | ✓ | | | | | | | | | | | | |
| 260 | Sato et al., 2015 | | | | | | ✓ | | | | | | | | |
| 261 | Schlichthorst et al., 2018 | | ✓ | | | | | | | | | | | | |
| 262 | Sciascia & Radin, 2017 | ✓ | | | | | | ✓ | | | | | | | |
| 263 | Sciascia et al., 2018 | ✓ | | | | | | ✓ | | | | | | | |
| 264 | Seabrook et al., 2018 | | ✓ | ✓ | | | | | | | | | ✓ | | |
| 265 | Seidl et al., 2018 | ✓ | | | | | | | | | | | | | |
| 266 | Sentana-Lledo et al., 2016 | ✓ | | | | | | | | | | | | | |
| 267 | Seo et al., 2014 | | | | | | | | | | ✓ | | | | |
| 268 | Sewalk et al., 2018 | | ✓ | | | | | | | | | | | | |
| 269 | SeyyedHosseini et al., 2018 | ✓ | | | | | | ✓ | | | | | | | |
| 270 | SeyyedHosseini et al., 2017 | | | | | | | | | | | | | ✓ | |
| 271 | SeyyedHosseini et al., 2017 | ✓ | | | | | | ✓ | | | | | | | |
| 272 | Sharpe et al., 2016 | ✓ | ✓ | | ✓ | | | | | | | | | | |
| 273 | Shi & Salmon, 2018 | | | | | ✓ | | | | | | | | | |
| 274 | Simpson et al., 2018 | | ✓ | | | | | | | | | | | | |
| 275 | Sinha et al., 2018 | | ✓ | ✓ | | | | | | | | | | | |

| Authors | Google | Twitter | Facebook | Instagram | Wikipedia | Other Social Media | Blogs/Forums/Communities | Websites/Platforms | News Outlets/Media | Electronic Health Records Databases/Call records/Online Surveys | Other Search Engines | Online Survey | Mobile App | N/A | Review |
|---------|---------------------------------|---------|----------|-----------|-----------|--------------------|--------------------------|--------------------|--------------------|---|----------------------|---------------|------------|-----|--------|
| 276 | Sinnenberg et al., 2018 | ✓ | | | | | | | | | | | | | |
| 277 | Smith et al., 2017 | | ✓ | | | | | | | ✓ | | | | | |
| 278 | Spyropoulos et al., 2018 | ✓ | | | | | | | | | | | | | ✓ |
| 279 | Staal et al., 2018 | | | | | | | ✓ | | | | | | | |
| 280 | Stefanidis et al., 2017 | | ✓ | | | | | | | | | | | | |
| 281 | Sudau et al., 2014 | | | | | | ✓ | | | | | | | | |
| 282 | Sueki, 2015 | | ✓ | | | | | | | | | ✓ | | | |
| 283 | Sugawara et al., 2016 | | ✓ | | | | | | | | | | | | |
| 284 | Sugawara et al., 2017 | | ✓ | | | | | ✓ | ✓ | | | | | | |
| 285 | Surian et al., 2016 | | ✓ | | | | | | | | | | | | |
| 286 | Tafti et al., 2017 | | | | | | ✓ | ✓ | | | | | | | |
| 287 | Tana et al., 2018 | ✓ | | | | | | | | | | | | | |
| 288 | Tangherlini et al., 2016 | | | | | | | ✓ | | | | | | | |
| 289 | Tapi Nzali et al., 2017 | | | ✓ | | | ✓ | | | | | | | | |
| 290 | Thackeray et al., 2013 | | ✓ | | | | | | | | | | | | |
| 291 | Tighe et al., 2015 | | ✓ | | | | | | | | | | | | |
| 292 | Timpka et al., 2014 | ✓ | | | | | | ✓ | | ✓ | | | | | |
| 293 | Tinschert et al., 2017 | | | | | | | | | | | | | | ✓ |
| 294 | Tougas et al., 2018 | | ✓ | ✓ | ✓ | | | | | | | | | | |
| 295 | Triemstra et al., 2018 | | ✓ | ✓ | ✓ | | | ✓ | | | | | | | |
| 296 | Troullos et al., 2014 | | | | | | | | | | | ✓ | | | |
| 297 | Tsuya et al., 2014 | | ✓ | | | | | | | | | | | | |
| 298 | Tufts et al., 2018 | | ✓ | | | | | | | | | | | | |
| 299 | Tyrawski & DeAndrea, 2015 | | ✓ | | | ✓ | | | | | | | | | |
| 300 | Utengen et al., 2017 | | ✓ | | | | | | | | | | | | |
| 301 | van Lent et al., 2017 | | ✓ | | | | | | ✓ | | | | | | |
| 302 | Vasconcellos-Silva et al., 2017 | ✓ | | | | | | | | | | | | | |
| 303 | Vickey & Breslin, 2017 | | ✓ | | | | | | | | | | | | |
| 304 | Wagner et al., 2017 | | ✓ | | | | | | | | | | | | |
| 305 | Wakamiya, 2018 | | ✓ | | | | | | | | | | | | |
| 306 | Wang & Chen, 2018 | ✓ | | | | | | | | | | | | | |
| 307 | Wang et al., 2015 | ✓ | | | | | | | | | | | | | |
| 308 | Weeg et al., 2015 | | ✓ | | | | | | | | | | | | |
| 309 | Williams et al., 2013 | | | | | | | | | | | | | | ✓ |
| 310 | Winchester et al., 2017 | ✓ | ✓ | | | ✓ | | | | | | | | | |

| Authors | Google | Twitter | Facebook | Instagram | Wikipedia | Other Social Media | Blogs/Forums/Communities | Websites/Platforms | News Outlets/Media | Electronic Health Records Databases/Call records/Online Surveys | Other Search Engines | Online Survey | Mobile App | N/A | Review |
|---------------------------------|--------|---------|----------|-----------|-----------|--------------------|--------------------------|--------------------|--------------------|---|----------------------|---------------|------------|-----|--------|
| 311 Wittmeier et al., 2014 | ✓ | ✓ | ✓ | | | | ✓ | | | | | | | | |
| 312 Wong et al., 2013 | | | | | | | | ✓ | | | | | | | |
| 313 Wong et al., 2015 | | ✓ | | | | | | | | | | | | | |
| 314 Wongkoblapp et al., 2017 | | | | | | | | | | | | | | | ✓ |
| 315 Woo et al., 2016 | | | | | | | | | | | | ✓ | | | |
| 316 Wood et al., 2018 | ✓ | | | | | | | | | | | | | | |
| 317 Xu & Liu, 2015 | | | | | | | | | | | | | | ✓ | |
| 318 Xu et al., 2018 | | | ✓ | | | | | | | | | | | | |
| 319 Xu et al., 2016 | | ✓ | | | | | | | | | | | | | |
| 320 Yagahara et al., 2018 | | ✓ | | | | | | | | | | | | | |
| 321 Yang et al., 2017 | | | | | | | | | | | | ✓ | | | |
| 322 Yin et al., 2015 | | ✓ | | | | | | | | | | | | | |
| 323 Yom-Tov & Gabrilovich, 2013 | | | | | | | | | | | | ✓ | | | |
| 324 Yom-Tov et al., 2014 | | | | | | | | | | | | ✓ | | | |
| 325 Yom-Tov et al., 2015 | | | | | ✓ | | | | | | | ✓ | | | |
| 326 Yom-Tov et al., 2014 | | ✓ | | | | | | | | | | ✓ | | | |
| 327 Yom-Tov & Lev-Ran, 2017 | | | | | | | | | | | | ✓ | | | |
| 328 Young, 2018 | | | | | | | | | | | | | | ✓ | |
| 329 Zeraatkar & Ahmadi, 2018 | | | | | | | | | | | | | | | ✓ |
| 330 Zhan et al., 2017 | | ✓ | | | | | | ✓ | | | | | | | |
| 331 Zhang et al., 2016 | ✓ | | | | | | | | | | | | | | |
| 332 Zhang et al., 2018 | | | | ✓ | | | | | | | | | | | |
| 333 Zhang et al., 2014 | | | | | | | | | | | | | ✓ | | |
| 334 Zhang et al., 2013 | | ✓ | | | | | | | | | | | | | |
| 335 Zhao & Yang, 2018 | | | | | | | ✓ | | | | | | | | |
| 336 Zheluk et al., 2012 | ✓ | | | | | | | | | | | ✓ | | | |
| 337 Zheluk et al., 2013 | ✓ | | | | | | | | | | | ✓ | | | |
| 338 Zheluk et al., 2014 | ✓ | | | | | | | | | | | ✓ | | | |

References

1. Abbate KJ, Hingle MD, Armin J, Giacobbi P Jr, Gordon J. Recruiting Women to a Mobile Health Smoking Cessation Trial: Low- and No-Cost Strategies. *JMIR Res Protoc* 2017;6(11):e219. PMID: 29101091
2. Abbe A, Falissard B. Stopping Antidepressants and Anxiolytics as Major Concerns Reported in Online Health Communities: A Text Mining Approach. *JMIR Ment Health* 2017;4(4):e48. PMID: 29061554
3. Abdellaoui R, Schück S, Texier N, Burgun A. Filtering Entities to Optimize Identification of Adverse Drug Reaction From Social Media: How Can the Number of Words Between Entities in the Messages Help? *JMIR Public Health Surveill* 2017;3(2):e36. PMID: 28642212
4. Abdellaoui R, Foulquia P, Texier N, Faviez C, Burgun A, Schack S. Detection of Cases of Noncompliance to Drug Treatment in Patient Forum Posts: Topic Model Approach. *J Med Internet Res*. 2018 Mar 14;20(3):e85. PMID:29540337
5. Adams S. Post-Panoptic Surveillance Through Healthcare Rating Sites: Who's watching whom? *Information Communication and Society*. 2013;16(2):215-235 DOI: 10.1080/1369118X.2012.701657
6. Adawi M, Bragazzi NL, Watad A, Sharif K, Amital H, Mahroum N. Discrepancies Between Classic and Digital Epidemiology in Searching for the Mayaro Virus: Preliminary Qualitative and Quantitative Analysis of Google Trends. *JMIR Public Health Surveill* 2017;3(4):e93. PMID: 29196278
7. Adrover C, Bodnar T, Huang Z, Telenti A, Salathé M. Identifying Adverse Effects of HIV Drug Treatment and Associated Sentiments Using Twitter. *JMIR Public Health Surveill* 2015;1(2):e7. PMID: 27227141
8. Adusumalli S, Lee H, Hoi Q, Koo SL, Tan IB, Ng PC. Assessment of Web-Based Consumer Reviews as a Resource for Drug Performance. *J Med Internet Res* 2015;17(8):e211. PMID: 26319108
9. Agarwal V, Zhang L, Zhu J, Fang S, Cheng T, Hong C, Shah NH. Impact of Predicting Health Care Utilization Via Web Search Behavior: A Data-Driven Analysis. *J Med Internet Res* 2016;18(9):e251. PMID: 27655225
10. Albalawi Y, Sixsmith J. Agenda Setting for Health Promotion: Exploring an Adapted Model for the Social Media Era. *JMIR Public Health Surveill* 2015;1(2):e21. PMID: 27227139
11. Allem JP, Escobedo P, Chu KH, Boley Cruz T, Unger JB. Images of Little Cigars and Cigarillos on Instagram Identified by the Hashtag #swisher: Thematic Analysis *J Med Internet Res* 2017;19(7):e255. PMID: 28710057
12. Allem JP, Dharmapuri L, Leventhal AM, Unger JB, Boley Cruz T. Hookah-Related Posts to Twitter From 2017 to 2018: Thematic Analysis. *J Med Internet Res*. 2018 Nov 19;20(11):e11669. PMID:30455162
13. Allem JP, Ferrara E, Uppu SP, Cruz TB, Unger JB. E-Cigarette Surveillance With Social Media Data: Social Bots, Emerging Topics, and Trends. *JMIR Public Health Surveill*. 2017 Dec 20;3(4):e98. doi: 10.2196/publichealth.8641. PMID:29263018
14. Allem JP, Ramanujam J, Lerman K, Chu KH, Boley Cruz T, Unger JB. Identifying Sentiment of Hookah-Related Posts on Twitter. *JMIR Public Health Surveill* 2017;3(4):e74. PMID: 29046267
15. Alnemer KA, Alhuzaim WM, Alnemer AA, Alharbi BB, Bawazir AS, Barayyan OR, Balaraj FK. Are Health-Related Tweets Evidence Based? Review and Analysis of Health-Related Tweets on Twitter. *J Med Internet Res* 2015;17(10):e246. PMID: 26515535.
16. Alvarez-Mon MA, Asunsolo del Barco A, Lahera G, Quintero J, Ferre F, Pereira-Sanchez V, Ortuño F, Alvarez-Mon M. Increasing Interest of Mass Communication Media and the General Public in the Distribution of Tweets About Mental Disorders: Observational Study. *J Med Internet Res* 2018;20(5):e205. PMID: 29807880
17. Alvaro N, Miyao Y, Collier N. TwiMed: Twitter and PubMed Comparable Corpus of Drugs, Diseases, Symptoms, and Their Relations. *JMIR Public Health Surveill* 2017;3(2):e24. PMID: 28468748
18. Anderson LS, Bell HG, Gilbert M, Davidson JE, Winter C, Barratt MJ, Win B, Painter JL, Menone C, Sayegh J, Dasgupta N. Using Social Listening Data to Monitor Misuse and Nonmedical Use of Bupropion: A Content Analysis. *JMIR Public Health Surveill*. 2017 Feb 1;3(1):e6. PMID:28148472

19. Aoki T, Suzuki T, Yagahara A, Hasegawa S, Tsuji S, Ogasawara K. Analysis of the Regionality of the Number of Tweets Related to the 2011 Fukushima Nuclear Power Station Disaster: Content Analysis. *JMIR Public Health Surveill* 2018;4(4):e70. PMID: 30563815
20. Arnhold M, Quade M, Kirch W. Mobile Applications for Diabetics: A Systematic Review and Expert-Based Usability Evaluation Considering the Special Requirements of Diabetes Patients Age 50 Years or Older. *J Med Internet Res* 2014;16(4):e104. PMID: 24718852
21. Aslam AA, Tsou MH, Spitzberg BH, An L, Gawron JM, Gupta DK, Peddecord KM, Nagel AC, Allen C, Yang JA, Lindsay S. The reliability of tweets as a supplementary method of seasonal influenza surveillance. *J Med Internet Res*. 2014 Nov 14;16(11):e250. doi: 10.2196/jmir.3532. PMID:25406040
22. Athilingam P, Jenkins B. Mobile Phone Apps to Support Heart Failure Self-Care Management: Integrative Review. *JMIR Cardio* 2018;2(1):e10057. DOI: 10.2196/10057
23. Ayers JW, Althouse BM, Allem JP, Ford DE, Ribisl KM, Cohen JE. A novel evaluation of World No Tobacco day in Latin America. *J Med Internet Res*. 2012 May 28;14(3):e77. doi: 10.2196/jmir.2148. PMID:22634568
24. Ayers JW, Westmaas JL, Leas EC, Benton A, Chen Y, Dredze M, Althouse BM. Leveraging Big Data to Improve Health Awareness Campaigns: A Novel Evaluation of the Great American Smokeout. *JMIR Public Health Surveill*. 2016 Mar 31;2(1):e16. PMID:27227151
25. Balls-Berry J, Sinicrope P, Valdez Soto M, Brockman T, Bock M, Patten C. Linking Podcasts With Social Media to Promote Community Health and Medical Research: Feasibility Study. *JMIR Form Res* 2018;2(2):e10025. PMID: 30684430
26. Baltrusaitis K, Santillana M, Crawley AW, Chunara R, Smolinski M, Brownstein JS. Determinants of Participants' Follow-Up and Characterization of Representativeness in Flu Near You, A Participatory Disease Surveillance System. *JMIR Public Health Surveill* 2017;3(2):e18. PMID: 28389417
27. Ben-Sasson A, Yom-Tov E. Online Concerns of Parents Suspecting Autism Spectrum Disorder in Their Child: Content Analysis of Signs and Automated Prediction of Risk. *J Med Internet Res* 2016;18(11):e300. PMID: 27876688
28. Berlinberg EJ, Deiner MS, Porco TC, Acharya NR. Monitoring Interest in Herpes Zoster Vaccination: Analysis of Google Search Data. *JMIR Public Health Surveill*. 2018 May 2;4(2):e10180. PMID:29720364
29. Bernardo TM, Rajic A, Young I, Robiadek K, Pham MT, Funk JA. Scoping Review on Search Queries and Social Media for Disease Surveillance: A Chronology of Innovation. *J Med Internet Res* 2013;15(7):e147. PMID: 23896182
30. Berry N, Lobban F, Belousov M, Emsley R, Nenadic G, Bucci S. #WhyWeTweetMH: Understanding Why People Use Twitter to Discuss Mental Health Problems. *J Med Internet Res* 2017;19(4):e107. PMID: 28381392
31. Bian J, Zhao Y, Salloum RG, Guo Y, Wang M, Prosperi M, Zhang H, Du X, Ramirez-Diaz LJ, He Z, Sun Y. Using Social Media Data to Understand the Impact of Promotional Information on Laypeople's Discussions: A Case Study of Lynch Syndrome. *J Med Internet Res* 2017;19(12):e414. PMID: 29237586
32. Birnbaum ML, Ernala SK, Rizvi AF, De Choudhury M, Kane JM. A Collaborative Approach to Identifying Social Media Markers of Schizophrenia by Employing Machine Learning and Clinical Appraisals. *J Med Internet Res* 2017;19(8):e289. PMID: 28807891
33. Bollegala D, Maskell S, Sloane R, Hajne J, Pirmohamed M. Causality Patterns for Detecting Adverse Drug Reactions From Social Media: Text Mining Approach. *JMIR Public Health Surveill* 2018;4(2):e51. PMID: 29743155
34. Bousquet C, Dahamna B, Guillemin-Lanne S, Darmoni SJ, Faviez C, Huot C, Katsahian S, Leroux V, Pereira S, Richard C, Schück S, Souvignet J, Lillo-Le Louët A, Texier N. The Adverse Drug Reactions from Patient Reports in Social Media Project: Five Major Challenges to Overcome to Operationalize Analysis and Efficiently Support Pharmacovigilance Process. *JMIR Res Protoc* 2017;6(9):e179. PMID: 28935617
35. Bragazzi NL. A Google Trends-based approach for monitoring NSSI. *Psychol Res Behav Manag*. 2013; 13;7:1-8. PMID:24376364

36. Bragazzi NL. Infodemiology and infoveillance of multiple sclerosis in Italy. *Mult Scler Int*. 2013;2013:924029. PMID:24027636
37. Bragazzi NL, Bacigaluppi S, Robba C, Nardone R, Trinka E, Brigo F. Infodemiology of status epilepticus: A systematic validation of the Google Trends-based search queries. *Epilepsy Behav*. 2016 Feb;55:120-3. doi: 10.1016/j.yebeh.2015.12.017. Epub 2016 Jan 13. PMID:26773681
38. Bragazzi NL, Bacigaluppi S, Robba C, Siri A, Canepa G, Brigo F. Infodemiological data of West-Nile virus disease in Italy in the study period 2004-2015. *Data Brief*. 2016 Nov 2;9:839-845. eCollection 2016 Dec. PMID:27872881
39. Bragazzi NL, Dini G, Toletone A, Brigo F, Durando P. Infodemiological data concerning silicosis in the USA in the period 2004-2010 correlating with real-world statistical data. *Data Brief*. 2016 Nov 13;10:457-464. PMID:28054008
40. Braithwaite SR, Giraud-Carrier C, West J, Barnes MD, Hanson CL. Validating Machine Learning Algorithms for Twitter Data Against Established Measures of Suicidality. *JMIR Ment Health* 2016;3(2):e21. PMID: 27185366
41. Brigo F, Erro R. Why do people google movement disorders? An infodemiological study of information seeking behaviors. *Neurol Sci*. 2016 May;37(5):781-7. PMID:26846327
42. Brigo F, Trinka E. Google search behavior for status epilepticus. *Epilepsy Behav*. 2015 Aug;49:146-9. doi: 10.1016/j.yebeh.2015.02.029. Epub 2015 Apr 11. PMID:25873438
43. Brigo F, Igwe SC, Ausserer H, Nardone R, Tezzon F, Bongiovanni LG, Tinazzi M, Trinka E. Terminology of psychogenic nonepileptic seizures. *Epilepsia*. 2015 Mar;56(3):e21-5. PMID:25631657
44. Brigo F, Igwe SC, Ausserer H, Nardone R, Tezzon F, Bongiovanni LG, Trinka E. Why do people Google epilepsy? An infodemiological study of online behavior for epilepsy related search terms. *Epilepsy Behav*. 2014 Feb;31:67-70. PMID:24361764
45. Brigo F, Igwe SC, Nardone R, Lochner P, Tezzon F, Otte WM. Wikipedia and neurological disorders. *J Clin Neurosci*. 2015 Jul;22(7):1170-2. PMID:25890773
46. Brigo F, Lattanzi S, Bragazzi N, Nardone R, Moccia M, Lavorgna L. Why do people search Wikipedia for information on multiple sclerosis? *Mult Scler Relat Disord*. 2018 Feb;20:210-214. PMID:29428464
47. Brigo F, Lattanzi S, Giussani G, Tassi L, Pietrafusa N, Galimberti CA, Nardone R, Bragazzi NL, Mecarelli O. Italian Wikipedia and epilepsy: An infodemiological study of online information-seeking behavior. *Epilepsy Behav*. 2018 Apr;81:119-122. PMID:29454607
48. Brigo F, Lochner P, Tezzon F, Nardone R. Web search behavior for multiple sclerosis: An infodemiological study. *Mult Scler Relat Disord*. 2014 Jul;3(4):440-3. PMID:25877054
49. Brigo F, Otte WM, Igwe SC, Ausserer H, Nardone R, Tezzon F, Trinka E. Information-seeking behaviour for epilepsy: an infodemiological study of searches for Wikipedia articles. *Epileptic Disord*. 2015 Dec;17(4):460-6. PMID:26575365
50. Brigo F., Igwe S.C., Nardone R., Orioli A., Otte W.M. Cancer information disparities on the internet: An infodemiological study. *Journal of Cancer Policy*. 2016;8:33-37 DOI: 10.1016/j.jcipo.2016.04.002
51. Broniatowski DA, Dredze M, Paul MJ, Dugas A. Using Social Media to Perform Local Influenza Surveillance in an Inner-City Hospital: A Retrospective Observational Study. *JMIR Public Health Surveill* 2015;1(1):e5. PMID: 27014744
52. Bubenzer R.H. Infodemiology as shown by influenza: New opportunities of the Internet [Infodemiologie am beispiel influenza: Die neuen chancen des Internets] *Klinikarzt*. 2009;38(2):62 DOI: 10.1055/s-0029-1214174
53. Burton SH, Tanner KW, Giraud-Carrier CG, West JH, Barnes MD. Right time, right place" health communication on Twitter: value and accuracy of location information. *J Med Internet Res*. 2012 Nov 15;14(6):e156. PMID:23154246
54. Callahan A, Pernek I, Stiglic G, Leskovec J, Strasberg HR, Shah NH. Analyzing Information Seeking and Drug-Safety Alert Response by Health Care Professionals as New Methods for Surveillance. *J Med Internet Res* 2015;17(8):e204. PMID: 26293444

55. Carrotte ER, Prichard I, Lim MSC. "Fitspiration" on Social Media: A Content Analysis of Gendered Images. *J Med Internet Res* 2017;19(3):e95. PMID: 28356239
56. Cartwright AF, Karunaratne M, Barr-Walker J, Johns NE, Upadhyay UD. Identifying National Availability of Abortion Care and Distance From Major US Cities: Systematic Online Search. *J Med Internet Res* 2018;20(5):e186. PMID: 29759954
57. Cavazos-Rehg P, Krauss M, Gruzca R, Bierut L. Characterizing the Followers and Tweets of a Marijuana-Focused Twitter Handle. *J Med Internet Res* 2014;16(6):e157. PMID: 24974893
58. Cawkwell PB, Lee L, Weitzman M, Sherman SE. Tracking Hookah Bars in New York: Utilizing Yelp as a Powerful Public Health Tool. *JMIR Public Health Surveill* 2015;1(2):e19. PMID: 27227137
59. Chan K, Ho S, Lam T. Infodemiology of alcohol use in Hong Kong mentioned on blogs: infoveillance study. *J Med Internet Res*. 2013 Sep 2;15(9):e192. PMID:23999327
60. Chen T, Dredze M. Vaccine Images on Twitter: Analysis of What Images are Shared. *J Med Internet Res* 2018;20(4):e130. PMID: 29615386
61. Chen L, Wang X, Peng T. Nature and Diffusion of Gynecologic Cancer-Related Misinformation on Social Media: Analysis of Tweets. *J Med Internet Res*. **2018;20(10):e11515**. PMID: [30327289](#)
62. Chen B, Shao J, Liu K, Cai G, Jiang Z, Huang Y, Gu H, Jiang J. Does Eating Chicken Feet With Pickled Peppers Cause Avian Influenza? Observational Case Study on Chinese Social Media During the Avian Influenza A (H7N9) Outbreak. *JMIR Public Health Surveill*. 2018 Mar 29;4(1):e32. PMID:29599109
63. Chen S, Xu Q, Buchenberger J, Bagavathi A, Fair G, Shaikh S, Krishnan S. Dynamics of Health Agency Response and Public Engagement in Public Health Emergency: A Case Study of CDC Tweeting Patterns During the 2016 Zika Epidemic. *JMIR Public Health Surveill*. 2018 Nov 22;4(4):e10827. doi: 10.2196/10827. PMID:30467106
64. Chen AT, Zhu SH, Conway M. What Online Communities Can Tell Us About Electronic Cigarettes and Hookah Use: A Study Using Text Mining and Visualization Techniques. *J Med Internet Res* 2015;17(9):e220. PMID: 26420469
65. Cheng Q, Li TM, Kwok CL, Zhu T, Yip PS. Assessing Suicide Risk and Emotional Distress in Chinese Social Media: A Text Mining and Machine Learning Study. *J Med Internet Res* 2017;19(7):e243. PMID: 28694239
66. Cheng TYM, Liu L, Woo BK. Analyzing Twitter as a Platform for Alzheimer-Related Dementia Awareness: Thematic Analyses of Tweets. *JMIR Aging* 2018;1(2):e11542. DOI: 10.2196/11542
67. Cherian R, Westbrook M, Ramo D, Sarkar U. Representations of Codeine Misuse on Instagram: Content Analysis. *JMIR Public Health Surveill* 2018;4(1):e22. PMID: 29559422
68. Chew C, Eysenbach G. Pandemics in the age of Twitter: content analysis of Tweets during the 2009 H1N1 outbreak. *PLoS One*. 2010 Nov 29;5(11):e14118. PMID:21124761
69. Chomutare T, Fernandez-Luque L, Årsand E, Hartvigsen G. Features of Mobile Diabetes Applications: Review of the Literature and Analysis of Current Applications Compared Against Evidence-Based Guidelines. *J Med Internet Res* 2011;13(3):e65. PMID: 21979293
70. Christmann CA, Hoffmann A, Bleser G. Stress Management Apps With Regard to Emotion-Focused Coping and Behavior Change Techniques: A Content Analysis. *JMIR Mhealth Uhealth* 2017;5(2):e22. PMID: 28232299
71. Chu KH, Sidhu AK, Valente TW. Electronic Cigarette Marketing Online: a Multi-Site, Multi-Product Comparison. *JMIR Public Health Surveill* 2015;1(2):e11. PMID: 27227129
72. Clyne W, Pezaro S, Deeny K, Kneafsey R. Using Social Media to Generate and Collect Primary Data: The #ShowsWorkplaceCompassion Twitter Research Campaign. *JMIR Public Health Surveill* 2018;4(2):e41. PMID: 29685866
73. Colditz JB, Chu KH, Emery SL, Larkin CR, James AE, Welling J, Primack BA. Toward Real-Time Infoveillance of Twitter Health Messages. *Am J Public Health*. 2018 Aug;108(8):1009-1014. PMID:29927648
74. Cole-Lewis H, Pugatch J, Sanders A, Varghese A, Posada S, Yun C, Schwarz M, Augustson E. Social Listening: A Content Analysis of E-Cigarette Discussions on Twitter. *J Med Internet Res* 2015;17(10):e243. PMID: 26508089

75. Cole-Lewis H, Varghese A, Sanders A, Schwarz M, Pugatch J, Augustson E. Assessing Electronic Cigarette-Related Tweets for Sentiment and Content Using Supervised Machine Learning. *J Med Internet Res* 2015;17(8):e208. PMID: 26307512
76. Conway M. Ethical Issues in Using Twitter for Public Health Surveillance and Research: Developing a Taxonomy of Ethical Concepts From the Research Literature. *J Med Internet Res* 2014;16(12):e290. PMID: [25533619](#)
77. Cortés V.D., Velásquez J.D., Ibáñez C.F. Twitter for marijuana infodemiology. Proceedings - 2017 IEEE/WIC/ACM International Conference on Web Intelligence, WI 2017: 730-736 DOI: 10.1145/3106426.3106541
78. Daniulaityte R, Chen L, Lamy FR, Carlson RG, Thirunarayan K, Sheth A. "When 'Bad' is 'Good'": Identifying Personal Communication and Sentiment in Drug-Related Tweets. *JMIR Public Health Surveill* 2016;2(2):e162. PMID: 27777215
79. Davis MA, Zheng K, Liu Y, Levy H. Public Response to Obamacare on Twitter. *J Med Internet Res* 2017;19(5):e167. PMID: 28550002
80. de Viron S, Suggs LS, Brand A, Van Oyen H. Communicating Genetics and Smoking Through Social Media: Are We There Yet?. *J Med Internet Res* 2013;15(9):e198. PMID: 24018012
81. DeJohn AD, Schulz EE, Pearson AL, Lachmar EM, Wittenborn AK. Identifying and Understanding Communities Using Twitter to Connect About Depression: Cross-Sectional Study. *JMIR Ment Health* 2018;5(4):e61. PMID: 30401662
82. Delaney KP, Kramer MR, Waller LA, Flanders WD, Sullivan PS. Using a Geolocation Social Networking Application to Calculate the Population Density of Sex-Seeking Gay Men for Research and Prevention Services. *J Med Internet Res* 2014;16(11):e249. PMID: 25406722
83. Delir Haghighi P, Kang YB, Buchbinder R, Burstein F, Whittle S. Investigating Subjective Experience and the Influence of Weather Among Individuals With Fibromyalgia: A Content Analysis of Twitter. *JMIR Public Health Surveill.* 2017 Jan 19;3(1):e4. PMID:28104577
84. Doan S, Ritchart A, Perry N, Chaparro JD, Conway M. How Do You #relax When You're #stressed? A Content Analysis and Infodemiology Study of Stress-Related Tweets. *JMIR Public Health Surveill.* 2017 Jun 13;3(2):e35. PMID:28611016
85. Domnich A., Arbuzova E.K., Signori A., Amicizia D., Panatto D., Gasparini R. Demand-based web surveillance of sexually transmitted infections in Russia. *International Journal of Public Health.* 2014;59(5):841-849 DOI: 10.1007/s00038-014-0581-7
86. Du L, Rachul C, Guo Z, Caulfield T. Gordie Howe's "Miraculous Treatment": Case Study of Twitter Users' Reactions to a Sport Celebrity's Stem Cell Treatment. *JMIR Public Health Surveill.* 2016 Mar 9;2(1):e8. PMID:27227162
87. Du J, Tang L, Xiang Y, Zhi D, Xu J, Song HY, Tao C. Public Perception Analysis of Tweets During the 2015 Measles Outbreak: Comparative Study Using Convolutional Neural Network Models. *J Med Internet Res* 2018;20(7):e236. PMID: 29986843
88. Duke JC, Hansen H, Kim AE, Curry L, Allen J. The Use of Social Media by State Tobacco Control Programs to Promote Smoking Cessation: A Cross-Sectional Study. *J Med Internet Res* 2014;16(7):e169. PMID: 25014311
89. Dunn AG, Leask J, Zhou X, Mandl KD, Coiera E. Associations Between Exposure to and Expression of Negative Opinions About Human Papillomavirus Vaccines on Social Media: An Observational Study. *J Med Internet Res* 2015;17(6):e144. PMID: 26063290
90. Dyson MP, Newton AS, Shave K, Featherstone RM, Thomson D, Wingert A, Fernandes RM, Hartling L. Social Media for the Dissemination of Cochrane Child Health Evidence: Evaluation Study. *J Med Internet Res* 2017;19(9):e308. PMID: 28864427
91. Edney S, Bogomolova S, Ryan J, Olds T, Sanders I, Maher C. Creating Engaging Health Promotion Campaigns on Social Media: Observations and Lessons From Fitbit and Garmin. *J Med Internet Res* 2018;20(12):e10911. PMID: 30530449

92. Eklund A.-M. Tracking changes in search behaviour at a health web site. *Studies in Health Technology and Informatics*. 2012; 180:858-862. DOI: 10.3233/978-1-61499-101-4-858
93. Espina K., Estuar Ma.R.J.E. Infodemiology for Syndromic Surveillance of Dengue and Typhoid Fever in the Philippines. *Procedia Computer Science*. 2017;121:554-561. DOI:10.1016/j.procs.2017.11.073
94. Espina K., Justina Estuar M.R., Ix D.J.S., Lara R.J.E., De Los Reyes V.C. Towards an Infodemiological Algorithm for Classification of Filipino Health Tweets. *Procedia Computer Science* 2016;100:686-692. DOI: 10.1016/j.procs.2016.09.212
95. Eysenbach G. Infodemiology and infoveillance tracking online health information and cyberbehavior for public health. *Am J Prev Med*. 2011 May;40(5 Suppl 2):S154-8. PMID:21521589
96. Eysenbach G. Infodemiology and infoveillance: framework for an emerging set of public health informatics methods to analyze search, communication and publication behavior on the Internet. *J Med Internet Res*. 2009 Mar 27;11(1):e11. PMID:19329408
97. Farhadloo M, Winneg K, Chan MPS, Hall Jamieson K, Albarracin D. Associations of Topics of Discussion on Twitter With Survey Measures of Attitudes, Knowledge, and Behaviors Related to Zika: Probabilistic Study in the United States. *JMIR Public Health Surveill* 2018;4(1):e16. PMID: 29426815
98. Foroughi F, Lam AK, Lim MSC, Saremi N, Ahmadvand A. "Googling" for Cancer: An Infodemiological Assessment of Online Search Interests in Australia, Canada, New Zealand, the United Kingdom, and the United States. *JMIR Cancer*. 2016 May 4;2(1):e5. PMID:28410185
99. Gabarron E, Serrano JA, Wynn R, Lau AY. Tweet Content Related to Sexually Transmitted Diseases: No Joking Matter. *J Med Internet Res* 2014;16(10):e228. PMID: 25289463
100. Gabarron E, Lau AY, Wynn R. Is There a Weekly Pattern for Health Searches on Wikipedia and Is the Pattern Unique to Health Topics?. *J Med Internet Res* 2015;17(12):e286. PMID: 26693859
101. García-Díaz J.A., Apolinario-Arzuabe O., Medina-Moreira J., Salavarría-Melo J.O., Lagos-Ortiz K., Luna-Aveiga H., Valencia-García R. Opinion mining for measuring the social perception of infectious diseases. An infodemiology approach *Communications in Computer and Information Science* 2018;883:229-239. DOI: 10.1007/978-3-030-00940-3_17
102. Gayle A, Shimaoka M. Public Response to Scientific Misconduct: Assessing Changes in Public Sentiment Toward the Stimulus-Triggered Acquisition of Pluripotency (STAP) Cell Case via Twitter. *JMIR Public Health Surveill* 2017;3(2):e21. PMID: 28428163
103. Genes N, Chary M, Chason K. Analysis of Twitter Users' Sharing of Official New York Storm Response Messages. *Med 2 0* 2014;3(1):e1. PMID: 25075245
104. Gianfredi V, Bragazzi NL, Mahamid M, Bisharat B, Mahroum N, Amital H, Adawi M. Monitoring public interest toward pertussis outbreaks: an extensive Google Trends-based analysis. *Public Health*. 2018 Dec;165:9-15. PMID:30342281
105. Gianfredi V, Bragazzi NL, Nucci D, Martini M, Rosselli R, Minelli L, Moretti M. Harnessing Big Data for Communicable Tropical and Sub-Tropical Disorders: Implications From a Systematic Review of the Literature. *Front Public Health*. 2018 Mar 21;6:90. eCollection 2018. PMID:29619364
106. Giat E, Yom-Tov E. Evidence From Web-Based Dietary Search Patterns to the Role of B12 Deficiency in Non-Specific Chronic Pain: A Large-Scale Observational Study. *J Med Internet Res* 2018;20(1):e4. PMID: 29305340
107. Gittelman S, Lange V, Gotway Crawford CA, Okoro CA, Lieb E, Dhingra SS, Trimarchi E. A New Source of Data for Public Health Surveillance: Facebook Likes. *J Med Internet Res* 2015;17(4):e98. PMID: 25895907
108. Gohil S, Vuik S, Darzi A. Sentiment Analysis of Health Care Tweets: Review of the Methods Used. *JMIR Public Health Surveill* 2018;4(2):e43. PMID: 29685871
109. Gough A, Hunter RF, Ajao O, Jurek A, McKeown G, Hong J, Barrett E, Ferguson M, McElwee G, McCarthy M, Kee F. Tweet for Behavior Change: Using Social Media for the Dissemination of Public Health Messages. *JMIR Public Health Surveill* 2017;3(1):e14. PMID: 28336503
110. Grajales FJ III, Sheps S, Ho K, Novak-Lauscher H, Eysenbach G. Social Media: A Review and Tutorial of Applications in Medicine and Health Care. *J Med Internet Res* 2014;16(2):e13. PMID: [24518354](#)

111. Greaves F, Ramirez-Cano D, Millett C, Darzi A, Donaldson L. Use of Sentiment Analysis for Capturing Patient Experience From Free-Text Comments Posted Online. *J Med Internet Res* 2013;15(11):e239. PMID: 24184993
112. Griffis HM, Kilaru AS, Werner RM, Asch DA, Hershey JC, Hill S, Ha YP, Sellers A, Mahoney K, Merchant RM. Use of Social Media Across US Hospitals: Descriptive Analysis of Adoption and Utilization. *J Med Internet Res* 2014;16(11):e264. PMID: 25431831
113. Gruzd A, Haythornthwaite C. Enabling Community Through Social Media. *J Med Internet Res* 2013;15(10):e248. PMID: 24176835
114. Gu H, Chen B, Zhu H, Jiang T, Wang X, Chen L, Jiang Z, Zheng D, Jiang J. Importance of Internet Surveillance in Public Health Emergency Control and Prevention: Evidence From a Digital Epidemiologic Study During Avian Influenza A H7N9 Outbreaks. *J Med Internet Res* 2014;16(1):e20. PMID: 24440770
115. Guy S., Ratzki-Leewing A., Bahati R., Gwadyr-Sridhar F. Social media: A systematic review to understand the evidence and application in infodemiology. *Lecture Notes of the Institute for Computer Sciences, Social-Informatics and Telecommunications Engineering* 2012;1-8. DOI: 10.1007/978-3-642-29262-0_1
116. Hamad EO, Savundranayagam MY, Holmes JD, Kinsella EA, Johnson AM. Toward a Mixed-Methods Research Approach to Content Analysis in The Digital Age: The Combined Content-Analysis Model and its Applications to Health Care Twitter Feeds. *J Med Internet Res*. 2016 Mar 8;18(3):e60. PMID:26957477
117. Hammer MJ. Ethical Considerations When Using Social Media for Research. *Oncol Nurs Forum*. 2017;44(4):410-412. PMID:28632249
118. Hand RK, Kenne D, Wolfram TM, Abram JK, Fleming M. Assessing the Viability of Social Media for Disseminating Evidence-Based Nutrition Practice Guideline Through Content Analysis of Twitter Messages and Health Professional Interviews: An Observational Study. *J Med Internet Res* 2016;18(11):e295. PMID: 27847349
119. Hanson CL, Burton SH, Giraud-Carrier C, West JH, Barnes MD, Hansen B. Tweaking and Tweeting: Exploring Twitter for Nonmedical Use of a Psychostimulant Drug (Adderall) Among College Students. *J Med Internet Res* 2013;15(4):e62. PMID: 23594933
120. Hanson CL, Cannon B, Burton S, Giraud-Carrier C. An Exploration of Social Circles and Prescription Drug Abuse Through Twitter. *J Med Internet Res* 2013;15(9):e189. PMID: 24014109
121. Harris JK, Choucair B, Maier RC, Jolani N, Bernhardt JM. Are Public Health Organizations Tweeting to the Choir? Understanding Local Health Department Twitter Followership. *J Med Internet Res* 2014;16(2):e31. PMID: 24571914
122. Harris JK, Moreland-Russell S, Choucair B, Mansour R, Staub M, Simmons K. Tweeting for and Against Public Health Policy: Response to the Chicago Department of Public Health's Electronic Cigarette Twitter Campaign. *J Med Internet Res* 2014;16(10):e238. PMID: 25320863
123. Hébert J, Robitaille H, Turcotte S, Légaré F. Online Dissemination Strategies of a Canada Research Chair: Overview and Lessons Learned. *JMIR Res Protoc* 2017;6(2):e27. PMID: 28235751
124. Hendriks H, Van den Putte B, Gebhardt WA, Moreno MA. Social Drinking on Social Media: Content Analysis of the Social Aspects of Alcohol-Related Posts on Facebook and Instagram. *J Med Internet Res* 2018;20(6):e226. PMID: 29934290
125. Hill S, Mao J, Ungar L, Hennessy S, Leonard CE, Holmes J. Natural supplements for H1N1 influenza: retrospective observational infodemiology study of information and search activity on the Internet. *J Med Internet Res*. 2011 May 10;13(2):e36. PMID:21558062
126. Hingle M, Yoon D, Fowler J, Kobourov S, Schneider ML, Falk D, Burd R. Collection and Visualization of Dietary Behavior and Reasons for Eating Using Twitter. *J Med Internet Res* 2013;15(6):e125. PMID: 23796439
127. Hswen Y, Naslund JA, Brownstein JS, Hawkins JB. Monitoring Online Discussions About Suicide Among Twitter Users With Schizophrenia: Exploratory Study. *JMIR Ment Health* 2018;5(4):e11483. PMID: 30545811

128. Huang M, ElTayeb O, Zolnoori M, Yao L. Public Opinions Toward Diseases: Infodemiological Study on News Media Data. *J Med Internet Res* 2018;20(5):e10047. PMID: 29739741
129. Huesch M, Chetlen A, Segel J, Schetter S. Frequencies of Private Mentions and Sharing of Mammography and Breast Cancer Terms on Facebook: A Pilot Study. *J Med Internet Res* 2017;19(6):e201. PMID: 28600279
130. Jankowski W, Hoffmann M. Can Google Searches Predict the Popularity and Harm of Psychoactive Agents?. *J Med Internet Res* 2016;18(2):e38. PMID: 26916984
131. Jones J, Pradhan M, Hosseini M, Kulanthaivel A, Hosseini M. Novel Approach to Cluster Patient-Generated Data Into Actionable Topics: Case Study of a Web-Based Breast Cancer Forum. *JMIR Med Inform.* 2018 Nov 29;6(4):e45. PMID:30497991
132. Jung Y, Hur C, Jung D, Kim M. Identifying Key Hospital Service Quality Factors in Online Health Communities. *J Med Internet Res* 2015;17(4):e90. PMID: 25855612
133. Jung H, Park HA, Song TM. Ontology-Based Approach to Social Data Sentiment Analysis: Detection of Adolescent Depression Signals. *J Med Internet Res* 2017;19(7):e259. PMID: 28739560
134. Kadry B, Chu LF, Kadry B, Gammas D, Macario A. Analysis of 4999 Online Physician Ratings Indicates That Most Patients Give Physicians a Favorable Rating. *J Med Internet Res* 2011;13(4):e95. PMID: 22088924
135. Kagashe I, Yan Z, Suheryani I. Enhancing Seasonal Influenza Surveillance: Topic Analysis of Widely Used Medicinal Drugs Using Twitter Data. *J Med Internet Res* 2017;19(9):e315. PMID: 28899847.
136. Kalf RR, Makady A, ten Ham RM, Meijboom K, Goettsch WG, On Behalf Of IMI-GetReal Workpackage 1. Use of Social Media in the Assessment of Relative Effectiveness: Explorative Review With Examples From Oncology. *JMIR Cancer* 2018;4(1):e11. PMID: 29884607
137. Kandadai V, Yang H, Jiang L, Yang CC, Fleisher L, Winston FK. Measuring Health Information Dissemination and Identifying Target Interest Communities on Twitter: Methods Development and Case Study of the @SafetyMD Network. *JMIR Res Protoc* 2016;5(2):e50. PMID: 27151100
138. Kandula S, Hsu D, Shaman J. Subregional Nowcasts of Seasonal Influenza Using Search Trends. *J Med Internet Res.* 2017 Nov 6;19(11):e370. PMID:29109069
139. Katsuki T, Mackey TK, Cuomo R. Establishing a Link Between Prescription Drug Abuse and Illicit Online Pharmacies: Analysis of Twitter Data. *J Med Internet Res.* 2015 Dec 16;17(12):e280. PMID:26677966
140. Keller MS, Mosadeghi S, Cohen ER, Kwan J, Spiegel BMR. Reproductive Health and Medication Concerns for Patients With Inflammatory Bowel Disease: Thematic and Quantitative Analysis Using Social Listening. *J Med Internet Res.* 2018 Jun 11;20(6):e206. PMID:29891471
141. Keller MS, Park HJ, Cunningham ME, Fouladian JE, Chen M, Spiegel BMR. Public Perceptions Regarding Use of Virtual Reality in Health Care: A Social Media Content Analysis Using Facebook. *J Med Internet Res* 2017;19(12):e419. PMID: 29258975
142. Kendra RL, Karki S, Eickholt JL, Gandy L. Characterizing the Discussion of Antibiotics in the Twittersphere: What is the Bigger Picture?. *J Med Internet Res* 2015;17(6):e154. PMID: 26091775
143. Khan M.A.H., Iwai M., Sezaki K. A robust and scalable framework for detecting self-reported illness from twitter 2012 IEEE 14th International Conference on e-Health Networking, Applications and Services, Healthcom 2012, 6379425:303-308 DOI: 10.1109/HealthCom.2012.6379425
144. Khoury MJ, Gwinn M, Dotson WD, Schully SD. Knowledge integration at the center of genomic medicine. *Genet Med.* 2012 Jul;14(7):643-7. PMID:22555656
145. Kim AE, Hopper T, Simpson S, Nonnemaker J, Lieberman AJ, Hansen H, Guillory J, Porter L. Using Twitter Data to Gain Insights into E-cigarette Marketing and Locations of Use: An Infoveillance Study. *J Med Internet Res.* 2015 Nov 6;17(11):e251. PMID:26545927
146. Kim M, Jung Y, Jung D, Hur C. Investigating the congruence of crowdsourced information with official government data: the case of pediatric clinics. *J Med Internet Res.* 2014 Feb 3;16(2):e29. PMID:24496094
147. Kim SJ, Marsch LA, Hancock JT, Das AK. Scaling Up Research on Drug Abuse and Addiction Through Social Media Big Data. *J Med Internet Res.* 2017 Oct 31;19(10):e353. PMID:29089287

148. Kim Y, Huang J, Emery S. Garbage in, Garbage Out: Data Collection, Quality Assessment and Reporting Standards for Social Media Data Use in Health Research, Infodemiology and Digital Disease Detection. *J Med Internet Res*. 2016 Feb 26;18(2):e41. PMID:26920122
149. Kim A, Miano T, Chew R, Eggers M, Nonnemaker J. Classification of Twitter Users Who Tweet About E-Cigarettes. *JMIR Public Health Surveill* 2017;3(3):e63. PMID: 28951381
150. Klembczyk JJ, Jalalpour M, Levin S, Washington RE, Pines JM, Rothman RE, Dugas AF. Google Flu Trends Spatial Variability Validated Against Emergency Department Influenza-Related Visits. *J Med Internet Res*. 2016 Jun 28;18(6):e175. PMID:27354313
151. Koh S, Gordon AS, Wienberg C, Sood SO, Morley S, Burke DM. Stroke Experiences in Weblogs: A Feasibility Study of Sex Differences. *J Med Internet Res* 2014;16(3):e84. PMID: 24647327
152. Konheim-Kalkstein YL, Miron-Shatz T, Israel LJ. How Women Evaluate Birth Challenges: Analysis of Web-Based Birth Stories. *JMIR Pediatr Parent* 2018;1(2):e12206. DOI: 10.2196/12206
153. Koschack J, Weibezahl L, Friede T, Himmel W, Makedonski P, Grabowski J. Scientific Versus Experiential Evidence: Discourse Analysis of the Chronic Cerebrospinal Venous Insufficiency Debate in a Multiple Sclerosis Forum. *J Med Internet Res* 2015;17(7):e159. PMID: 26133525
154. Kostkova P, Fowler D, Wiseman S, Weinberg JR. Major Infection Events Over 5 Years: How Is Media Coverage Influencing Online Information Needs of Health Care Professionals and the Public?. *J Med Internet Res* 2013;15(7):e107. PMID: 23856364
155. Krueger EA, Young SD. Twitter: A Novel Tool for Studying the Health and Social Needs of Transgender Communities. *JMIR Mental Health*. 2015;2(2).e16
156. Kürzinger ML, Schück S, Texier N, Abdellaoui R, Faviez C, Pouget J, Zhang L, Tcherny-Lessenot S, Lin S, Juhaeri J. Web-Based Signal Detection Using Medical Forums Data in France: Comparative Analysis. *J Med Internet Res* 2018;20(11):e10466. PMID: 30459145
157. Lachmar EM, Wittenborn AK, Bogen KW, McCauley HL. #MyDepressionLooksLike: Examining Public Discourse About Depression on Twitter. *JMIR Ment Health* 2017;4(4):e43. PMID: 29046270
158. Lama Y, Chen T, Dredze M, Jamison A, Quinn SC, Broniatowski DA. Discordance Between Human Papillomavirus Twitter Images and Disparities in Human Papillomavirus Risk and Disease in the United States: Mixed-Methods Analysis. *J Med Internet Res* 2018;20(9):e10244. PMID: 30217792
159. Lardon J, Abdellaoui R, Bellet F, Asfari H, Souvignet J, Texier N, Jaulent MC, Beyens MN, Burgun A, Bousquet C. Adverse Drug Reaction Identification and Extraction in Social Media: A Scoping Review. *J Med Internet Res* 2015;17(7):e171. PMID: 26163365
160. Lau AY, Siek KA, Fernandez-Luque L, Tange H, Chhanabhai P, Li SY, Elkin PL, Arjabi A, Walczowski L, Ang CS, Eysenbach G. The role of social media for patients and consumer health. Contribution of the IMIA Consumer Health Informatics Working Group. *Yearb Med Inform*. 2011;6:131-8. Review. PMID:21938338
161. Lavorgna L, Brigo F, Moccia M, Leocani L, Lanzillo R, Clerico M, Abbadessa G, Schmierer K, Solaro C, Prosperini L, Tedeschi G, Giovannoni G, Bonavita S. e-Health and multiple sclerosis: An update. *Mult Scler*. 2018 Nov;24(13):1657-1664. PMID:30231004
162. Lazard AJ, Saffer AJ, Wilcox GB, Chung AD, Mackert MS, Bernhardt JM. E-Cigarette Social Media Messages: A Text Mining Analysis of Marketing and Consumer Conversations on Twitter. *JMIR Public Health Surveill* 2016;2(2):e171. PMID: 27956376
163. Leal Neto O, Dimech GS, Libel M, de Souza WV, Cesse E, Smolinski M, Oliveira W, Albuquerque J. Saúde na Copa: The World's First Application of Participatory Surveillance for a Mass Gathering at FIFA World Cup 2014, Brazil. *JMIR Public Health Surveill* 2017;3(2):e26. PMID: 28473308
164. Lee JL, DeCamp M, Dredze M, Chisolm MS, Berger ZD. What Are Health-Related Users Tweeting? A Qualitative Content Analysis of Health-Related Users and Their Messages on Twitter. *J Med Internet Res* 2014;16(10):e237. PMID: 25591063
165. Lee D, Lee H, Choi M. Examining the Relationship Between Past Orientation and US Suicide Rates: An Analysis Using Big Data-Driven Google Search Queries. *J Med Internet Res* 2016;18(2):e35. PMID: 26868917

166. Lenoir P, Moulahi B, Azé J, Bringay S, Mercier G, Carbonnel F. Raising Awareness About Cervical Cancer Using Twitter: Content Analysis of the 2015 #SmearForSmear Campaign. *J Med Internet Res* 2017;19(10):e344. PMID: 29038096
167. Leung R, Guo H, Pan X. Social Media Users' Perception of Telemedicine and mHealth in China: Exploratory Study. *JMIR Mhealth Uhealth* 2018;6(9):e181. PMID: 30274969
168. Li Q, Wang C, Liu R, Wang L, Zeng DD, Leischow SJ. Understanding Users' Vaping Experiences from Social Media: Initial Study Using Sentiment Opinion Summarization Techniques. *J Med Internet Res*. 2018 Aug 15;20(8):e252. PMID:30111530
169. Liang B, Scammon DL. Incidence of Online Health Information Search: A Useful Proxy for Public Health Risk Perception. *J Med Internet Res* 2013;15(6):e114. PMID: 23773974
170. Lienemann BA, Unger JB, Cruz TB, Chu KH. Methods for Coding Tobacco-Related Twitter Data: A Systematic Review. *J Med Internet Res* 2017;19(3):e91. PMID: 28363883
171. Ling R, Lee J. Disease Monitoring and Health Campaign Evaluation Using Google Search Activities for HIV and AIDS, Stroke, Colorectal Cancer, and Marijuana Use in Canada: A Retrospective Observational Study. *JMIR Public Health Surveill*. 2016 Oct 12;2(2):e156. PMID:27733330
172. Liu X, Bao Z, Liu H, Wang Z. The quality and characteristics of leading general hospitals' websites in China. *J Med Syst*. 2011 Dec;35(6):1553-62. PMID:20703762
173. Liu Y, Mei Q, Hanauer DA, Zheng K, Lee JM. Use of Social Media in the Diabetes Community: An Exploratory Analysis of Diabetes-Related Tweets. *JMIR Diabetes* 2016;1(2):e4. PMID: 30291053
174. Liu K, Huang S, Miao ZP, Chen B, Jiang T, Cai G, Jiang Z, Chen Y, Wang Z, Gu H, Chai C, Jiang J. Identifying Potential Norovirus Epidemics in China via Internet Surveillance. *J Med Internet Res* 2017;19(8):e282. PMID: 28790023
175. Liu S, Zhu M, Yu DJ, Rasin A, Young SD. Using Real-Time Social Media Technologies to Monitor Levels of Perceived Stress and Emotional State in College Students: A Web-Based Questionnaire Study. *JMIR Ment Health* 2017;4(1):e2. PMID: [28073737](#)
176. Liu S, Zhu M, Young SD. Monitoring Freshman College Experience Through Content Analysis of Tweets: Observational Study. *JMIR Public Health Surveill* 2018;4(1):e5. PMID: 29326096
177. Livelio E.D., Cheng C. Intelligent dengue infoveillance using gated recurrent neural learning and cross-label frequencies Proceedings - 2018 IEEE International Conference on Agents, ICA 2018, 8459963:2-7 DOI: 10.1109/AGENTS.2018.8459963
178. Lu FS, Hou S, Baltrusaitis K, Shah M, Leskovec J, Sosic R, Hawkins J, Brownstein J, Conidi G, Gunn J, Gray J, Zink A, Santillana M. Accurate Influenza Monitoring and Forecasting Using Novel Internet Data Streams: A Case Study in the Boston Metropolis. *JMIR Public Health Surveill* 2018;4(1):e4. PMID: 29317382
179. Lyles CR, Godbehere A, Le G, El Ghaoui L, Sarkar U. Applying Sparse Machine Learning Methods to Twitter: Analysis of the 2012 Change in Pap Smear Guidelines. A Sequential Mixed-Methods Study. *JMIR Public Health Surveill* 2016;2(1):e21. PMID: 27288093
180. Mackey TK, Liang BA. Global Reach of Direct-to-Consumer Advertising Using Social Media for Illicit Online Drug Sales. *J Med Internet Res* 2013;15(5):e105. DOI: 10.2196/jmir.2610. PMID: 23718965
181. Mackey T, Kalyanam J, Klugman J, Kuzmenko E, Gupta R. Solution to Detect, Classify, and Report Illicit Online Marketing and Sales of Controlled Substances via Twitter: Using Machine Learning and Web Forensics to Combat Digital Opioid Access. *J Med Internet Res* 2018;20(4):e10029. PMID: 29613851
182. Madden KM. The Seasonal Periodicity of Healthy Contemplations About Exercise and Weight Loss: Ecological Correlational Study. *JMIR Public Health Surveill* 2017;3(4):e92. PMID: 29237582
183. Mahoney LM, Tang T, Ji K, Ulrich-Schad J. The Digital Distribution of Public Health News Surrounding the Human Papillomavirus Vaccination: A Longitudinal Infodemiology Study. *JMIR Public Health Surveill*. 2015 Mar 18;1(1):e2. PMID:27227125
184. Mahroum N, Watad A, Rosselli R, Brigo F, Chiesa V, Siri A, Ben-Ami Shor D, Martini M, Bragazzi NL, Adawi M. An infodemiological investigation of the so-called "Fluad effect" during the 2014/2015 influenza

- vaccination campaign in Italy: Ethical and historical implications. *Hum Vaccin Immunother.* 2018 Mar 4;14(3):712-718. PMID:29293392
185. Majumder MS, Santillana M, Mekaru SR, McGinnis DP, Khan K, Brownstein JS. Utilizing Nontraditional Data Sources for Near Real-Time Estimation of Transmission Dynamics During the 2015-2016 Colombian Zika Virus Disease Outbreak. *JMIR Public Health Surveill* 2016;2(1):e30. PMID: 27251981
 186. Manchaiah V, Ratinaud P, Andersson G. Representation of Tinnitus in the US Newspaper Media and in Facebook Pages: Cross-Sectional Analysis of Secondary Data. *Interact J Med Res* 2018;7(1):e9. PMID: 29739734
 187. Mao C, Wu XY, Fu XH, Di MY, Yu YY, Yuan JQ, Yang ZY, Tang JL. An Internet-Based Epidemiological Investigation of the Outbreak of H7N9 Avian Influenza A in China Since Early 2013. *J Med Internet Res* 2014;16(9):e221. PMID: 25257217
 188. Marcon AR, Klostermann P, Caulfield T. Chiropractic and Spinal Manipulation Therapy on Twitter: Case Study Examining the Presence of Critiques and Debates. *JMIR Public Health Surveill.* 2016 Sep 16;2(2):e153. PMID:27637456
 189. Marcus MA, Westra HA, Eastwood JD, Barnes KL, Mobilizing Minds Research Group . What Are Young Adults Saying About Mental Health? An Analysis of Internet Blogs. *J Med Internet Res* 2012;14(1):e17. PMID: 22569642
 190. Martinez M, Park SB, Maison I, Mody V, Soh LS, Parihar HS. iOS Appstore-Based Phone Apps for Diabetes Management: Potential for Use in Medication Adherence. *JMIR Diabetes* 2017;2(2):e12. PMID: 30291096
 191. Martinez-Arroyo G, Ramos-Gomez S, Rojero-Gil EK, Rojas-Gongora JA, Barajas-Ochoa A, Bustamante-Montes LP, Yañez J, Ramos-Remus C. Potential uses of an infodemiology approach for health-care services for rheumatology. *Clin Rheumatol.* 2019 Mar;38(3):869-876. PMID:30448932
 192. Martinez-Millana A, Fernandez-Llatas C, Basagoiti Bilbao I, Traver Salcedo M, Traver Salcedo V. Evaluating the Social Media Performance of Hospitals in Spain: A Longitudinal and Comparative Study. *J Med Internet Res* 2017;19(5):e181. PMID: 28536091
 193. Martins-Filho PRS, Mendes MLT, Reinheimer DM, do Nascimento-Júnior EM, Vaez AC, Santos VS, Santos HP Jr. Femicide trends in Brazil: relationship between public interest and mortality rates. *Arch Womens Ment Health.* 2018 Oct;21(5):579-582. PMID:29594384
 194. Massey PM, Leader A, Yom-Tov E, Budenz A, Fisher K, Klassen AC. Applying Multiple Data Collection Tools to Quantify Human Papillomavirus Vaccine Communication on Twitter. *J Med Internet Res* 2016;18(12):e318. PMID: 27919863
 195. Matsuda S, Aoki K, Tomizawa S, Sone M, Tanaka R, Kuriki H, Takahashi Y. Analysis of Patient Narratives in Disease Blogs on the Internet: An Exploratory Study of Social Pharmacovigilance. *JMIR Public Health Surveill* 2017;3(1):e10. PMID: 28235749
 196. Mavragani A., Ochoa G. Forecasting AIDS prevalence in the United States using online search traffic data. *J Big Data.* 2018;5(1):17. DOI: 10.1186/s40537-018-0126-7
 197. Mavragani A., Ochoa G. Infección de enfermedades infecciosas en USA: STDs, tuberculosis, and hepatitis. *J Big Data.* 2018;5(1):30. DOI: 10.1186/s40537-018-0140-9
 198. Mavragani A, Ochoa G, Tsagarakis KP. Assessing the Methods, Tools, and Statistical Approaches in Google Trends Research: Systematic Review. *J Med Internet Res.* 2018 Nov 6;20(11):e270. PMID:30401664
 199. Mavragani A, Sampri A, Sypsa K, Tsagarakis KP. Integrating Smart Health in the US Health Care System: Infodemiology Study of Asthma Monitoring in the Google Era. *JMIR Public Health Surveill.* 2018 Mar 12;4(1):e24. PMID:29530839
 200. Mazzocut M, Truccolo I, Antonini M, Rinaldi F, Omero P, Ferrarin E, De Paoli P, Tasso C. Web Conversations About Complementary and Alternative Medicines and Cancer: Content and Sentiment Analysis. *J Med Internet Res* 2016;18(6):e120. PMID: 27311444
 201. McNaughton EC, Coplan PM, Black RA, Weber SE, Chilcoat HD, Butler SF. Monitoring of Internet Forums to Evaluate Reactions to the Introduction of Reformulated OxyContin to Deter Abuse. *J Med Internet Res* 2014;16(5):e119. PMID: 24800858

202. Meaney S, Cussen L, Greene RA, O'Donoghue K. Reaction on Twitter to a Cluster of Perinatal Deaths: A Mixed Method Study. *JMIR Public Health Surveill.* 2016 Jul 27;2(2):e36. PMID:27466002
203. Mejova Y, Weber I, Fernandez-Luque L. Online Health Monitoring using Facebook Advertisement Audience Estimates in the United States: Evaluation Study. *JMIR Public Health Surveill.* 2018 Mar 28;4(1):e30. PMID:29592849
204. McIver DJ, Hawkins JB, Chunara R, Chatterjee AK, Bhandari A, Fitzgerald TP, Jain SH, Brownstein JS. Characterizing Sleep Issues Using Twitter. *J Med Internet Res* 2015;17(6):e140. PMID: 26054530
205. Menachemi N, Rahurkar S, Rahurkar M. Using Web-Based Search Data to Study the Public's Reactions to Societal Events: The Case of the Sandy Hook Shooting. *JMIR Public Health Surveill.* 2017 Mar 23;3(1):e12. PMID:28336508 .
206. Mendiola MF, Kalnicki M, Lindenauer S. Valuable Features in Mobile Health Apps for Patients and Consumers: Content Analysis of Apps and User Ratings. *JMIR Mhealth Uhealth* 2015;3(2):e40. PMID: 25972309
207. Metwally O, Blumberg S, Ladabaum U, Sinha SR. Using Social Media to Characterize Public Sentiment Toward Medical Interventions Commonly Used for Cancer Screening: An Observational Study. *J Med Internet Res* 2017;19(6):e200. PMID: 28592395.
208. Miller M, Banerjee T, Muppalla R, Romine W, Sheth A. What Are People Tweeting About Zika? An Exploratory Study Concerning Its Symptoms, Treatment, Transmission, and Prevention. *JMIR Public Health Surveill* 2017;3(2):e38. PMID: 28630032
209. Mishori R, Singh LO, Levy B, Newport C. Mapping physician Twitter networks: describing how they work as a first step in understanding connectivity, information flow, and message diffusion. *J Med Internet Res.* 2014 Apr 14;16(4):e107. PMID:24733146
210. Mnadla S, Bragazzi NL, Rouissi M, Chaalali A, Siri A, Padulo J, Ardigiani LP, Brigo F, Chamari K, Knechtle B. Infodemiological data of Ironman Triathlon in the study period 2004-2013. *Data Brief.* 2016 Aug 27;9:123-7. PMID:27642618
211. Moccia M, Brigo F, Tedeschi G, Bonavita S, Lavorgna L. Neurology and the Internet: a review. *Neurol Sci.* 2018 Jun;39(6):981-987. PMID:29594831
212. Mollema L, Harmsen IA, Broekhuizen E, Clijnk R, De Melker H, Paulussen T, Kok G, Ruiters R, Das E. Disease Detection or Public Opinion Reflection? Content Analysis of Tweets, Other Social Media, and Online Newspapers During the Measles Outbreak in the Netherlands in 2013. *J Med Internet Res* 2015;17(5):e128. PMID: 26013683
213. Mowery D, Smith H, Cheney T, Stoddard G, Coppersmith G, Bryan C, Conway M. Understanding Depressive Symptoms and Psychosocial Stressors on Twitter: A Corpus-Based Study. *J Med Internet Res* 2017;19(2):e48. PMID: 28246066
214. Mukhija D, Venkatraman A, Nagpal SJS. Effectivity of Awareness Months in Increasing Internet Search Activity for Top Malignancies Among Women. *JMIR Public Health Surveill.* 2017 Aug 21;3(3):e55. PMID:28827213
215. Muralidhara S, Paul MJ. #Healthy Selfies: Exploration of Health Topics on Instagram. *JMIR Public Health Surveill* 2018;4(2):e10150. PMID: 29959106
216. Myslín M, Zhu SH, Chapman W, Conway M. Using Twitter to Examine Smoking Behavior and Perceptions of Emerging Tobacco Products. *J Med Internet Res* 2013;15(8):e174. PMID: 23989137
217. Nagar R, Yuan Q, Freifeld CC, Santillana M, Nojima A, Chunara R, Brownstein JS. A case study of the New York City 2012-2013 influenza season with daily geocoded Twitter data from temporal and spatiotemporal perspectives. *J Med Internet Res.* 2014 Oct 20;16(10):e236. PMID:25331122
218. Nagel AC, Tsou MH, Spitzberg BH, An L, Gawron JM, Gupta DK, Yang JA, Han S, Peddecord KM, Lindsay S, Sawyer MH. The complex relationship of realspace events and messages in cyberspace: case study of influenza and pertussis using tweets. *J Med Internet Res.* 2013 Oct 24;15(10):e237. PMID:24158773
219. Nakada H, Yuji K, Tsubokura M, Ohsawa Y, Kami M. Development of a national agreement on human papillomavirus vaccination in Japan: an infodemiology study. *J Med Internet Res.* 2014 May 15;16(5):e129. PMID:24834471

220. Nakhasi A, Shen AX, Passarella RJ, Appel LJ, Anderson CA. Online Social Networks That Connect Users to Physical Activity Partners: A Review and Descriptive Analysis. *J Med Internet Res* 2014;16(6):e153. PMID: 24936569
221. Nascimento TD, DosSantos MF, Danciu T, DeBoer M, van Holsbeeck H, Lucas SR, Aiello C, Khatib L, Bender MA; UMSoD (Under)Graduate Class Of 2014., Zubieta JK, DaSilva AF. Real-time sharing and expression of migraine headache suffering on Twitter: a cross-sectional infodemiology study. *J Med Internet Res*. 2014 Apr 3;16(4):e96. PMID:24698747
222. Nguyen QC, Li D, Meng HW, Kath S, Nsoesie E, Li F, Wen M. Building a National Neighborhood Dataset From Geotagged Twitter Data for Indicators of Happiness, Diet, and Physical Activity. *JMIR Public Health Surveill* 2016;2(2):e158. PMID: 27751984
223. Nishimoto N, Ota M, Yagahara A, Ogasawara K. Estimating the Duration of Public Concern After the Fukushima Dai-ichi Nuclear Power Station Accident From the Occurrence of Radiation Exposure-Related Terms on Twitter: A Retrospective Data Analysis. *JMIR Public Health Surveill*. 2016 Nov 25;2(2):e168. PMID:27888168
224. Noll-Hussong M. Whiplash Syndrome Reloaded: Digital Echoes of Whiplash Syndrome in the European Internet Search Engine Context. *JMIR Public Health Surveill*. 2017 Mar 27;3(1):e15. PMID:28347974
225. Nsoesie EO, Buckeridge DL, Brownstein JS. Guess Who's Not Coming to Dinner? Evaluating Online Restaurant Reservations for Disease Surveillance. *J Med Internet Res* 2014;16(1):e22. PMID: 24451921
226. Odlum M, Yoon S, Broadwell P, Brewer R, Kuang D. How Twitter Can Support the HIV/AIDS Response to Achieve the 2030 Eradication Goal: In-Depth Thematic Analysis of World AIDS Day Tweets. *JMIR Public Health Surveill*. 2018 Nov 22;4(4):e10262. PMID:30467102
227. Oldroyd RA, Morris MA, Birkin M. Identifying Methods for Monitoring Foodborne Illness: Review of Existing Public Health Surveillance Techniques. *JMIR Public Health Surveill*. 2018 Jun 6;4(2):e57. PMID:29875090
228. Oser TK, Oser SM, McGinley EL, Stuckey HL. A Novel Approach to Identifying Barriers and Facilitators in Raising a Child With Type 1 Diabetes: Qualitative Analysis of Caregiver Blogs. *JMIR Diabetes* 2017;2(2):e27. PMID: 30291073
229. Ozan-Rafferty ME, Johnson JA, Shah GH, Kursun A. In the Words of the Medical Tourist: An Analysis of Internet Narratives by Health Travelers to Turkey. *J Med Internet Res* 2014;16(2):e43. PMID: 24513565
230. Pan CL, Lin CH, Lin YR, Wen HY, Wen JC. The Significance of Witness Sensors for Mass Casualty Incidents and Epidemic Outbreaks. *J Med Internet Res* 2018;20(2):e39. PMID: 29396388
231. Park SH, Hong SH. Identification of Primary Medication Concerns Regarding Thyroid Hormone Replacement Therapy From Online Patient Medication Reviews: Text Mining of Social Network Data. *J Med Internet Res* 2018;20(10):e11085. PMID: 30355555
232. Peiper NC, Baumgartner PM, Chew RF, Hsieh YP, Bieler GS, Bobashev GV, Siegel C, Zarkin GA. Patterns of Twitter Behavior Among Networks of Cannabis Dispensaries in California. *J Med Internet Res* 2017;19(7):e236. PMID: 28676471
233. Pervaiz F, Pervaiz M, Abdur Rehman N, Saif U. FluBreaks: Early Epidemic Detection from Google Flu Trends. *J Med Internet Res* 2012;14(5):e125. PMID: 23037553
234. Pesala S, Virtanen MJ, Sane J, Mustonen P, Kaila M, Helve O. Health Information-Seeking Patterns of the General Public and Indications for Disease Surveillance: Register-Based Study Using Lyme Disease. *JMIR Public Health Surveill*. 2017 Nov 6;3(4):e86. PMID:29109071
235. Pesala S, Virtanen MJ, Sane J, Jousimaa J, Lyytikäinen O, Murtopuro S, Mustonen P, Kaila M, Helve O. Health Care Professionals' Evidence-Based Medicine Internet Searches Closely Mimic the Known Seasonal Variation of Lyme Borreliosis: A Register-Based Study. *JMIR Public Health Surveill* 2017;3(2):e19. PMID: 28400357
236. Phillips CA, Barz Leahy A, Li Y, Schapira MM, Bailey LC, Merchant RM. Relationship Between State-Level Google Online Search Volume and Cancer Incidence in the United States: Retrospective Study. *J Med Internet Res*. 2018 Jan 8;20(1):e6. PMID:29311051

237. Poirier C, Lavenu A, Bertaud V, Campillo-Gimenez B, Chazard E, Cuggia M, BouzillÃ G. Real Time Influenza Monitoring Using Hospital Big Data in Combination with Machine Learning Methods: Comparison Study. *JMIR Public Health Surveill.* 2018 Dec 21;4(4):e11361. PMID:30578212
238. Pretorius KA, Mackert M, Wilcox GB. Sudden Infant Death Syndrome and Safe Sleep on Twitter: Analysis of Influences and Themes to Guide Health Promotion Efforts. *JMIR Pediatr Parent* 2018;1(2):e10435. DOI: 10.2196/10435
239. Priest C, Knopf A, Groves D, Carpenter JS, Furrey C, Krishnan A, Miller WR, Otte JL, Palakal M, Wiehe S, Wilson J. Finding the Patient's Voice Using Big Data: Analysis of Users' Health-Related Concerns in the ChaCha Question-and-Answer Service (2009-2012). *J Med Internet Res.* 2016 Mar 9;18(3):e44. PMID:26960745
240. Rabarison KM, Croston MA, Englar NK, Bish CL, Flynn SM, Johnson CC. Measuring Audience Engagement for Public Health Twitter Chats: Insights From #LiveFitNOLA. *JMIR Public Health Surveill* 2017;3(2):e34. PMID: 28596149
241. Radin M, Sciascia S. Infodemiology of systemic lupus erythematosus using Google Trends. *Lupus.* 2017 Jul;26(8):886-889. PMID:28162030
242. Radzikowski J, Stefanidis A, Jacobsen KH, Croitoru A, Crooks A, Delamater PL. The Measles Vaccination Narrative in Twitter: A Quantitative Analysis. *JMIR Public Health Surveill* 2016;2(1):e1. PMID: 27227144
243. Rastegar-Mojarad M, Liu H, Nambisan P. Using Social Media Data to Identify Potential Candidates for Drug Repurposing: A Feasibility Study. *JMIR Res Protoc* 2016;5(2):e121. PMID: 27311964
244. Rastegar-Mojarad M, Ye Z, Wall D, Murali N, Lin S. Collecting and Analyzing Patient Experiences of Health Care From Social Media. *JMIR Res Protoc* 2015;4(3):e78. PMID: 26137885
245. Ricard BJ, Marsch LA, Crosier B, Hassanpour S. Exploring the Utility of Community-Generated Social Media Content for Detecting Depression: An Analytical Study on Instagram. *J Med Internet Res* 2018;20(12):e11817. PMID: 30522991
246. Risson V, Saini D, Bonzani I, Huisman A, Olson M. Patterns of Treatment Switching in Multiple Sclerosis Therapies in US Patients Active on Social Media: Application of Social Media Content Analysis to Health Outcomes Research. *J Med Internet Res* 2016;18(3):e62. PMID: 26987964
247. Roberts MJ, Perera M, Lawrentschuk N, Romanic D, Papa N, Bolton D. Globalization of Continuing Professional Development by Journal Clubs via Microblogging: A Systematic Review. *J Med Internet Res* 2015;17(4):e103. PMID: 25908092
248. Robillard JM, Whiteley L, Johnson TW, Lim J, Wasserman WW, Illes J. Utilizing Social Media to Study Information-Seeking and Ethical Issues in Gene Therapy. *J Med Internet Res* 2013;15(3):e44. PMID: 23470490
249. Rocchetti M, Marfia G, Salomoni P, Prandi C, Zagari RM, Gningaye Kengni FL, Bazzoli F, Montagnani M. Attitudes of Crohn's Disease Patients: Infodemiology Case Study and Sentiment Analysis of Facebook and Twitter Posts. *JMIR Public Health Surveill.* 2017 Aug 9;3(3):e51. PMID:28793981
250. Rocheleau M, Sadasivam RS, Baquis K, Stahl H, Kinney RL, Pagoto SL, Houston TK. An Observational Study of Social and Emotional Support in Smoking Cessation Twitter Accounts: Content Analysis of Tweets. *J Med Internet Res* 2015;17(1):e18. PMID: 25589009
251. Rose SW, Jo CL, Binns S, Buenger M, Emery S, Ribisl KM. Perceptions of Menthol Cigarettes Among Twitter Users: Content and Sentiment Analysis. *J Med Internet Res* 2017;19(2):e56. PMID: 28242592
252. Rosenblum S, Yom-Tov E. Seeking Web-Based Information About Attention Deficit Hyperactivity Disorder: Where, What, and When. *J Med Internet Res* 2017;19(4):e126. PMID: 28432038
253. Sadah SA, Shahbazi M, Wiley MT, Hristidis V. A Study of the Demographics of Web-Based Health-Related Social Media Users. *J Med Internet Res* 2015;17(8):e194. PMID: 26250986
254. Sadah SA, Shahbazi M, Wiley MT, Hristidis V. Demographic-Based Content Analysis of Web-Based Health-Related Social Media. *J Med Internet Res* 2016;18(6):e148. PMID: 27296242
255. Saha K, Weber I, Birnbaum ML, De Choudhury M. Characterizing Awareness of Schizophrenia Among Facebook Users by Leveraging Facebook Advertisement Estimates. *J Med Internet Res* 2017;19(5):e156. PMID: 28483739

256. Samaras L, García-Barriocanal E, Sicilia MA. Syndromic Surveillance Models Using Web Data: The Case of Influenza in Greece and Italy Using Google Trends. *JMIR Public Health Surveill* 2017;3(4):e90. PMID: 29158208
257. Santos JC, Matos S. Analysing Twitter and web queries for flu trend prediction. *Theor Biol Med Model*. 2014 May 7;11 Suppl 1:S6. PMID:25077431.
258. Sanz-Lorente M, Wanden-Berghe C, Castejón-Bolea R, Sanz-Valero J. Web 2.0 Tools in the Prevention of Curable Sexually Transmitted Diseases: Scoping Review. *J Med Internet Res* 2018;20(3):e113. PMID: 29567633
259. Sarker A, Chandrashekar P, Magge A, Cai H, Klein A, Gonzalez G. Discovering Cohorts of Pregnant Women From Social Media for Safety Surveillance and Analysis. *J Med Internet Res* 2017;19(10):e361. PMID: 29084707
260. Sato A, Aramaki E, Shimamoto Y, Tanaka S, Kawakami K. Blog Posting After Lung Cancer Notification: Content Analysis of Blogs Written by Patients or Their Families. *JMIR Cancer* 2015;1(1):e5. PMID: 28410169
261. Schlichthorst M, King K, Turnure J, Sukunesan S, Phelps A, Pirkis J. Influencing the Conversation About Masculinity and Suicide: Evaluation of the Man Up Multimedia Campaign Using Twitter Data. *JMIR Ment Health* 2018;5(1):e14. PMID: 29449203.
262. Sciascia S, Radin M. What can Google and Wikipedia can tell us about a disease? Big Data trends analysis in Systemic Lupus Erythematosus. *Int J Med Inform*. 2017 Nov;107:65-69. PMID:29029693
263. Sciascia S, Radin M, Unlu O, Erkan D, Roccatello D. Infodemiology of antiphospholipid syndrome: Merging informatics and epidemiology. *Eur J Rheumatol*. 2018 Jul;5(2):92-95. PMID:30185355
264. Seabrook EM, Kern ML, Fulcher BD, Rickard NS. Predicting Depression From Language-Based Emotion Dynamics: Longitudinal Analysis of Facebook and Twitter Status Updates. *J Med Internet Res* 2018;20(5):e168. PMID: 29739736
265. Seidl S, Schuster B, Rùth M, Biedermann T, Zink A. What Do Germans Want to Know About Skin Cancer? A Nationwide Google Search Analysis From 2013 to 2017. *J Med Internet Res* 2018;20(5):e10327. PMID: 29698213
266. Sentana-Lledo D, Barbu CM, Ngo MN, Wu Y, Sethuraman K, Levy MZ. Seasons, Searches, and Intentions: What The Internet Can Tell Us About The Bed Bug (Hemiptera: Cimicidae) Epidemic. *J Med Entomol*. 2016 Jan;53(1):116-21. PMID:26474879
267. Seo DW, Jo MW, Sohn CH, Shin SY, Lee J, Yu M, Kim WY, Lim KS, Lee S. Cumulative Query Method for Influenza Surveillance Using Search Engine Data. *J Med Internet Res* 2014;16(12):e289. PMID: 25517353
268. Sewalk KC, Tuli G, Hswen Y, Brownstein JS, Hawkins JB. Using Twitter to Examine Web-Based Patient Experience Sentiments in the United States: Longitudinal Study. *J Med Internet Res* 2018;20(10):e10043. PMID: 30314959
269. SeyyedHosseini S., Asemi A., Shabani A., CheshmehSohrabi M. An infodemiology study on breast cancer in Iran: Health information supply versus health information demand in PubMed and Google Trends Electronic Library 2018;36(2):258-269 DOI: 10.1108/EL-03-2017-0062
270. SeyyedHosseini S., Asemi A., Shabani A., CheshmehSohrabi M. Infodemiology: A new presence concept in human information interaction based on eysenbach's view Iranian Journal of Information Processing Management 2017;32(3):605-629
271. SeyyedHosseini S., Asemi A., Shabani A., CheshmehSohrabi M. Scientific publication behavior versus information seeking behavior: An infodemiological study on stomach cancer. *Webology* 2017;14(1):21-31
272. Sharpe JD, Hopkins RS, Cook RL, Striley CW. Evaluating Google, Twitter, and Wikipedia as Tools for Influenza Surveillance Using Bayesian Change Point Analysis: A Comparative Analysis. *JMIR Public Health Surveill* 2016;2(2):e161. PMID: 27765731
273. Shi J, Salmon CT. Identifying Opinion Leaders to Promote Organ Donation on Social Media: Network Study. *J Med Internet Res* 2018;20(1):e7. PMID: 29317384

274. Simpson SS, Adams N, Brugman CM, Conners TJ. Detecting Novel and Emerging Drug Terms Using Natural Language Processing: A Social Media Corpus Study. *JMIR Public Health Surveill* 2018;4(1):e2. PMID: 29311050
275. Sinha MS, Freifeld CC, Brownstein JS, Donneyong MM, Rausch P, Lappin BM, Zhou EH, Dal Pan GJ, Pawar AM, Hwang TJ, Avorn J, Kesselheim AS. Social Media Impact of the Food and Drug Administration's Drug Safety Communication Messaging About Zolpidem: Mixed-Methods Analysis. *JMIR Public Health Surveill* 2018;4(1):e1. PMID: 29305342
276. Sinnenberg L, Mancheno C, Barg FK, Asch DA, Rivard CL, Horst-Martz E, Buttenheim A, Ungar L, Merchant R. Content Analysis of Metaphors About Hypertension and Diabetes on Twitter: Exploratory Mixed-Methods Study. *JMIR Diabetes* 2018;3(4):e11177. PMID: 30578222
277. Smith RJ, Crutchley P, Schwartz HA, Ungar L, Shofer F, Padrez KA, Merchant RM. Variations in Facebook Posting Patterns Across Validated Patient Health Conditions: A Prospective Cohort Study. *J Med Internet Res* 2017;19(1):e7. PMID: 28062392
278. Spyropoulos AC, Myrka A, Triller DM, Ragan S, York C, King JM, Lee TK. Uptake and Utilization of the Management of Anticoagulation in the Periprocedural Period App: Longitudinal Analysis. *JMIR Mhealth Uhealth* 2018;6(12):e11090. PMID: 30578235
279. Staal YC, van de Nobelen S, Havermans A, Talhout R. New Tobacco and Tobacco-Related Products: Early Detection of Product Development, Marketing Strategies, and Consumer Interest. *JMIR Public Health Surveill*. 2018 May 28;4(2):e55. PMID:29807884 .
280. Stefanidis A, Vraga E, Lamprianidis G, Radzikowski J, Delamater PL, Jacobsen KH, Pfoser D, Croitoru A, Crooks A. Zika in Twitter: Temporal Variations of Locations, Actors, and Concepts. *JMIR Public Health Surveill* 2017;3(2):e22. PMID: 28428164
281. Sudau F, Friede T, Grabowski J, Koschack J, Makedonski P, Himmel W. Sources of Information and Behavioral Patterns in Online Health Forums: Observational Study. *J Med Internet Res* 2014;16(1):e10. PMID: 24425598
282. Sueki H. The association of suicide-related Twitter use with suicidal behaviour: a cross-sectional study of young internet users in Japan. *J Affect Disord*. 2015 Jan 1;170:155-60. PMID:25240843
283. Sugawara Y, Narimatsu H, Tsuya A, Tanaka A, Fukao A. Medical Institutions and Twitter: A Novel Tool for Public Communication in Japan. *JMIR Public Health Surveill* 2016;2(1):e19. PMID: 27227154
284. Sugawara Y, Tanimoto T, Miyagawa S, Murakami M, Tsuya A, Tanaka A, Kami M, Narimatsu H. Scientific Misconduct and Social Media: Role of Twitter in the Stimulus Triggered Acquisition of Pluripotency Cells Scandal. *J Med Internet Res* 2017;19(2):e57. PMID: 28246071
285. Surian D, Nguyen DQ, Kennedy G, Johnson M, Coiera E, Dunn AG. Characterizing Twitter Discussions About HPV Vaccines Using Topic Modeling and Community Detection. *J Med Internet Res* 2016;18(8):e232. PMID: 27573910
286. Tafti A, Badger J, LaRose E, Shirzadi E, Mahnke A, Mayer J, Ye Z, Page D, Peissig P. Adverse Drug Event Discovery Using Biomedical Literature: A Big Data Neural Network Adventure. *JMIR Med Inform* 2017;5(4):e51. PMID: 29222076
287. Tana JC, Kettunen J, Eirola E, Paakkonen H. Diurnal Variations of Depression-Related Health Information Seeking: Case Study in Finland Using Google Trends Data. *JMIR Ment Health*. 2018 May 23;5(2):e43. doi: 10.2196/mental.9152. PMID:29792291
288. Tangherlini TR, Roychowdhury V, Glenn B, Crespi CM, Bandari R, Wadia A, Falahi M, Ebrahimzadeh E, Bastani R. "Mommy Blogs" and the Vaccination Exemption Narrative: Results From A Machine-Learning Approach for Story Aggregation on Parenting Social Media Sites. *JMIR Public Health Surveill* 2016;2(2):e166. PMID: 27876690
289. Tapi Nzali MD, Bringay S, Lavergne C, Mollevi C, Opitz T. What Patients Can Tell Us: Topic Analysis for Social Media on Breast Cancer. *JMIR Med Inform* 2017;5(3):e23. PMID: 28760725

290. Thackeray R, Neiger BL, Burton SH, Thackeray CR. Analysis of the Purpose of State Health Departments' Tweets: Information Sharing, Engagement, and Action. *J Med Internet Res* 2013;15(11):e255. PMID: 24217361
291. Tighe PJ, Goldsmith RC, Gravenstein M, Bernard HR, Fillingim RB. The Painful Tweet: Text, Sentiment, and Community Structure Analyses of Tweets Pertaining to Pain. *J Med Internet Res* 2015;17(4):e84. PMID: 25843553
292. Timpka T, Spreco A, Dahlström Ö, Eriksson O, Gursky E, Ekberg J, Blomqvist E, Strömgren M, Karlsson D, Eriksson H, Nyce J, Hinkula J, Holm E. Performance of eHealth Data Sources in Local Influenza Surveillance: A 5-Year Open Cohort Study. *J Med Internet Res* 2014;16(4):e116. PMID: 24776527
293. Tinschert P, Jakob R, Barata F, Kramer JN, Kowatsch T. The Potential of Mobile Apps for Improving Asthma Self-Management: A Review of Publicly Available and Well-Adopted Asthma Apps. *JMIR Mhealth Uhealth* 2017;5(8):e113. PMID: 28768606
294. Tougas ME, Chambers CT, Corkum P, Robillard JM, Gruzd A, Howard V, Kampen A, Boerner KE, Hundert AS. Social Media Content About Children's Pain and Sleep: Content and Network Analysis. *JMIR Pediatr Parent* 2018;1(2):e11193. DOI: 10.2196/11193
295. Triemstra JD, Poepelman RS, Arora VM. Correlations Between Hospitals' Social Media Presence and Reputation Score and Ranking: Cross-Sectional Analysis. *J Med Internet Res* 2018;20(11):e289. PMID: 30409768
296. Troullos E, Baird L, Jayawardena S. Common Cold Symptoms in Children: Results of an Internet-Based Surveillance Program. *J Med Internet Res* 2014;16(6):e144. PMID: 24945090
297. Tsuya A, Sugawara Y, Tanaka A, Narimatsu H. Do Cancer Patients Tweet? Examining the Twitter Use of Cancer Patients in Japan. *J Med Internet Res* 2014;16(5):e137. PMID: 24867458
298. Tufts C, Polsky D, Volpp KG, Groeneveld PW, Ungar L, Merchant RM, Pelullo AP. Characterizing Tweet Volume and Content About Common Health Conditions Across Pennsylvania: Retrospective Analysis. *JMIR Public Health Surveill* 2018;4(4):e10834. PMID: 30522989
299. Tyrawski J, DeAndrea DC. Pharmaceutical Companies and Their Drugs on Social Media: A Content Analysis of Drug Information on Popular Social Media Sites. *J Med Internet Res* 2015;17(6):e130. PMID: 26032738
300. Utengen A, Rouholiman D, Gamble JG, Grajales FJ III, Pradhan N, Staley AC, Bernstein L, Young SD, Clauson KA, Chu LF. Patient Participation at Health Care Conferences: Engaged Patients Increase Information Flow, Expand Propagation, and Deepen Engagement in the Conversation of Tweets Compared to Physicians or Researchers. *J Med Internet Res* 2017;19(8):e280. PMID: 28818821
301. van Lent LG, Sungur H, Kunneman FA, van de Velde B, Das E. Too Far to Care? Measuring Public Attention and Fear for Ebola Using Twitter. *J Med Internet Res* 2017;19(6):e193. PMID: 28611015
302. Vasconcellos-Silva PR, Carvalho DBF, Trajano V, de La Rocque LR, Sawada ACMB, Juvanhol LL. Using Google Trends Data to Study Public Interest in Breast Cancer Screening in Brazil: Why Not a Pink February? *JMIR Public Health Surveill*. 2017 Apr 6;3(2):e17. PMID:28385679
303. Vickey T, Breslin JG. Online Influence and Sentiment of Fitness Tweets: Analysis of Two Million Fitness Tweets. *JMIR Public Health Surveill* 2017;3(4):e82. PMID: 29089294
304. Wagner M, Lamos V, Yom-Tov E, Pebody R, Cox IJ. Estimating the Population Impact of a New Pediatric Influenza Vaccination Program in England Using Social Media Content. *J Med Internet Res* 2017;19(12):e416. PMID: 29269339
305. Wakamiya S, Kawai Y, Aramaki E. Twitter-Based Influenza Detection After Flu Peak via Tweets With Indirect Information: Text Mining Study. *JMIR Public Health Surveill*. 2018 Sep 25;4(3):e65. PMID:30274968
306. Wang HW, Chen DR. Economic Recession and Obesity-Related Internet Search Behavior in Taiwan: Analysis of Google Trends Data. *JMIR Public Health Surveill*. 2018 Apr 6;4(2):e37. PMID:29625958
307. Wang HW, Chen DR, Yu HW, Chen YM. Forecasting the Incidence of Dementia and Dementia-Related Outpatient Visits With Google Trends: Evidence From Taiwan. *J Med Internet Res* 2015;17(11):e264. PMID: 26586281

308. Weeg C, Schwartz HA, Hill S, Merchant RM, Arango C, Ungar L. Using Twitter to Measure Public Discussion of Diseases: A Case Study. *JMIR Public Health Surveill* 2015;1(1):e6. PMID: 26925459
309. Williams SA, Terras M, Warwick C. How Twitter Is Studied in the Medical Professions: A Classification of Twitter Papers Indexed in PubMed. *Med 2013*;2(2):e2. DOI: 10.2196/med20.2269
310. Winchester DE, Baxter D, Markham MJ, Beyth RJ. Quality of Social Media and Web-Based Information Regarding Inappropriate Nuclear Cardiac Stress Testing and the Choosing Wisely Campaign: A Cross-Sectional Study. *Interact J Med Res* 2017;6(1):e6. PMID: 28473305
311. Wittmeier K, Holland C, Hobbs-Murison K, Crawford E, Beauchamp C, Milne B, Morris M, Keijzer R. Analysis of a Parent-Initiated Social Media Campaign for Hirschsprung's Disease. *J Med Internet Res* 2014;16(12):e288. PMID: 25499427
312. Wong PWC, Fu KW, Yau RSP, Ma HHM, Law YW, Chang SS, Yip PSF. Accessing Suicide-Related Information on the Internet: A Retrospective Observational Study of Search Behavior. *J Med Internet Res* 2013;15(1):e3. PMID: 23305632
313. Wong CA, Sap M, Schwartz A, Town R, Baker T, Ungar L, Merchant RM. Twitter Sentiment Predicts Affordable Care Act Marketplace Enrollment. *J Med Internet Res* 2015;17(2):e51. PMID: 25707038
314. Wongkoblap A, Vadillo MA, Curcin V. Researching Mental Health Disorders in the Era of Social Media: Systematic Review. *J Med Internet Res*. 2017 Jun 29;19(6):e228. PMID:28663166
315. Woo H, Cho Y, Shim E, Lee JK, Lee CG, Kim SH. Estimating Influenza Outbreaks Using Both Search Engine Query Data and Social Media Data in South Korea. *J Med Internet Res*. 2016 Jul 4;18(7):e177. PMID:27377323
316. Wood LN, Jamnagerwalla J, Markowitz MA, Thum DJ, McCarty P, Medendorp AR, Raz S, Kim JH. Public Awareness of Uterine Power Morcellation Through US Food and Drug Administration Communications: Analysis of Google Trends Search Term Patterns. *JMIR Public Health Surveill* 2018;4(2):e47. PMID: 29699965
317. Xu W, Liu Y. mHealthApps: A Repository and Database of Mobile Health Apps. *JMIR Mhealth Uhealth* 2015;3(1):e28. PMID: 25786060
318. Xu X, Litchman ML, Gee PM, Whatcott W, Chacon L, Holmes J, Srinivasan SS. Predicting Prediabetes Through Facebook Postings: Protocol for a Mixed-Methods Study. *JMIR Res Protoc*. 2018 Dec 14;7(12):e10720. PMID:30552084
319. Xu S, Markson C, Costello KL, Xing CY, Demissie K, Llanos AA. Leveraging Social Media to Promote Public Health Knowledge: Example of Cancer Awareness via Twitter. *JMIR Public Health Surveill* 2016;2(1):e17. PMID: 27227152
320. Yagahara A, Hanai K, Hasegawa S, Ogasawara K. Relationships Among Tweets Related to Radiation: Visualization Using Co-Occurring Networks. *JMIR Public Health Surveill* 2018;4(1):e26. PMID: 29549069
321. Yang H, Li S, Sun L, Zhang X, Hou J, Wang Y. Effects of the Ambient Fine Particulate Matter on Public Awareness of Lung Cancer Risk in China: Evidence from the Internet-Based Big Data Platform. *JMIR Public Health Surveill* 2017;3(4):e64. PMID: 28974484
322. Yin Z, Fabbri D, Rosenbloom ST, Malin B. A Scalable Framework to Detect Personal Health Mentions on Twitter. *J Med Internet Res*. 2015 Jun 5;17(6):e138. PMID:26048075
323. Yom-Tov E, Gabrilovich E. Postmarket drug surveillance without trial costs: discovery of adverse drug reactions through large-scale analysis of web search queries. *J Med Internet Res*. 2013 Jun 18;15(6):e124. PMID:23778053
324. Yom-Tov E, White RW, Horvitz E. Seeking Insights About Cycling Mood Disorders via Anonymized Search Logs. *J Med Internet Res* 2014;16(2):e65. PMID: 24568936
325. Yom-Tov E, Borsa D, Hayward AC, McKendry RA, Cox IJ. Automatic Identification of Web-Based Risk Markers for Health Events. *J Med Internet Res* 2015;17(1):e29. PMID: 25626480
326. Yom-Tov E, Borsa D, Cox IJ, McKendry RA. Detecting disease outbreaks in mass gatherings using Internet data. *J Med Internet Res*. 2014 Jun 18;16(6):e154. PMID:24943128

327. Yom-Tov E, Lev-Ran S. Adverse Reactions Associated With Cannabis Consumption as Evident From Search Engine Queries. *JMIR Public Health Surveill* 2017;3(4):e77. PMID: 29074469
328. Young SD. Social Media as a New Vital Sign: Commentary. *J Med Internet Res* 2018;20(4):e161. PMID: [29712631](#)
329. Zeraatkar K, Ahmadi M. Trends of infodemiology studies: a scoping review. *Health Info Libr J.* 2018 Jun;35(2):91-120. PMID:29729073
330. Zhan Y, Liu R, Li Q, Leischow SJ, Zeng DD. Identifying Topics for E-Cigarette User-Generated Contents: A Case Study From Multiple Social Media Platforms. *J Med Internet Res.* 2017 Jan 20;19(1):e24. PMID:28108428
331. Zhang Z, Zheng X, Zeng DD, Leischow SJ. Tracking Dabbing Using Search Query Surveillance: A Case Study in the United States. *J Med Internet Res* 2016;18(9):e252. PMID: 27637361
332. Zhang Y, Allem JP, Unger JB, Boley Cruz T. Automated Identification of Hookahs (Waterpipes) on Instagram: An Application in Feature Extraction Using Convolutional Neural Network and Support Vector Machine Classification. *J Med Internet Res* 2018;20(11):e10513. PMID: 30452385
333. Zhang MW, Ho CS, Fang P, Lu Y, Ho RC. Methodology of developing a smartphone application for crisis research and its clinical application. *Technol Health Care.* 2014;22(4):547-59. PMID:24898865
334. Zhang N, Campo S, Janz KF, Eckler P, Yang J, Snetselaar LG, Signorini A. Electronic word of mouth on twitter about physical activity in the United States: exploratory infodemiology study. *J Med Internet Res.* 2013 Nov 20;15(11):e261. PMID:24257325
335. Zhao M, Yang CC. Drug Repositioning to Accelerate Drug Development Using Social Media Data: Computational Study on Parkinson Disease. *J Med Internet Res* 2018;20(10):e271. PMID: 30309833
336. Zheluk A, Gillespie JA, Quinn C. Searching for Truth: Internet Search Patterns as a Method of Investigating Online Responses to a Russian Illicit Drug Policy Debate. *J Med Internet Res* 2012;14(6):e165. PMID: 23238600
337. Zheluk A, Quinn C, Hercz D, Gillespie JA. Internet search patterns of human immunodeficiency virus and the digital divide in the Russian Federation: infoveillance study. *J Med Internet Res.* 2013 Nov 12;15(11):e256. doi: 10.2196/jmir.2936.
338. Zheluk A, Quinn C, Meylakhs P. Internet search and krokodil in the Russian Federation: an infoveillance study. *J Med Internet Res.* 2014 Sep 18;16(9):e212. PMID:25236385